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A  
T R E A T I S E  
O N

VENEREAL MALADIES:

In which are explained,  
The Origin and Communication of these  
Diseases in general, and of their Species in  
particular; with the specifick Remedies for  
their Cure.

Besides two other

T R E A T I S E S;

The one, on Scrophulous and other Ulcers;  
the other, on the Quintessences drawn from the  
three Kingdoms; with several Dissertations on  
the Matters of the Composition of the Reme-  
dies, and their Preparation:

A N D A

Preliminary Discourse,

Wherein it is shewn,  
That the CHEMICAL are superior to the Vulgar  
and GALENICAL REMEDIES.

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*Translated from the FRENCH of*  
M. JOURDAN DE PELLERIN,  
*Physician-Chemist to his Most Christian Majesty.*

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To which is subjoined,  
*A Dissertation on HERMAPHRODITES,*  
By GEORGE ARNAUD, Surgeon.

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L O N D O N:

Printed for A. MILLAR, in the Strand. MDCCL

( 407 )

TREATISE

ON THE NATURE AND CAUSES OF THE DYSPEPSIA

BY J. H. WELLS, M.D.



TREATISE

ON THE NATURE AND CAUSES OF THE DYSPEPSIA  
BY J. H. WELLS, M.D.  
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THE NATURE AND CAUSES OF THE DYSPEPSIA  
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## P R E F A C E.

**T**HE great number of different treatises, and that crowd of prescriptions which have appeared in the world, whose effects answer so ill to the expectations raised of them, have thrown such a discredit on those who treat this matter, that the good are confounded with the bad; and bating a few, whose merit, and reputation of being authors, are apt to dazzle, we no longer deign to cast our eyes on performances of later date; the grave and dogmatical tone captivates the reader; the pupil often scarce allows himself the liberty of examining into the vanity and futility of the imaginations of the master; and the publick becomes the victim of its own

prejudices. Animated by a zeal, truly natural, for the preservation of my fellow-creatures, I have taken upon me to combat the principles upon which men commonly build ; to reject the ordinary methods ; to reform the remedies in use, whose insufficiency and danger we have shewn ; and, in fine, to propose our own, more natural, less dangerous, and of consequence more efficacious.

We shall divide this treatise into three parts, each of which will again be divided into books, and these into several chapters, preceded by a preliminary dissertation ; wherein I shew, by evident reasons and incontestable proofs, that the remedies laboured with care by a good artist, according to the invariable rules of true and genuine chemistry, which are no other than those of nature, as chemistry is nothing other but the accurate knowledge of the inmost recesses of that very nature : that these remedies, I say, are preferable



ble to those of the vulgar and galenical pharmacy.

After this, in order to be able to apply to my subject the general principles, which I have explained in this discourse, both on nature in general, and in particular on the animal kind, especially man, whom his dignity, and the natural perfection of his frame, raise and distinguish with advantage above all the others, I give a general notion of the venereal disease ; after which I thence deduce the causes, both antecedent and consequent. I enter upon the detail of the different forms it assumes, and I indicate whence these differences proceed ; I determine their seat, and the source whence the pocky venom derives into the parts of our bodies : and after having explained the different symptoms thereof, I propound the remedies proper for the cure of so great and so fatal an evil.

But it would be in some measure to heighten the evil to persons of under-

standing and attention to the interests of their health and preservation, if after having made them sensible of the greatness of the disease, the multiplicity of its dangerous effects, and the insufficiency of the ordinary remedies, we did not explain to them the qualities, the virtues, and efficacy of the remedies of our proposal ; and this is what we have endeavoured to do with all the attention and accuracy possible. We make it appear, that by our preparations, we correct the intemperature, the crudity, and the mixtion of heterogeneities, which the mercury, which is the principal of our specificks, has carried with it from the bosom and womb of its formation and nourishment : we leave in its substance only what is proper to relieve, and retrench every thing that might prove noxious. Whence I conclude, that as much as mercury, prepared and administered in the common method, is insufficient or dangerous in the cure of venereal diseases, so much is it efficacious, powerful, mild, and benign, prepared and administered in  
our



our method. The patient, through our preparations, runs no hazard, of what age and temperament soever he be, strong or weak, to what degree soever he has the distemper, and how complicated soever it may be.

To this universal specifick, I join a preparation of viper, which makes a perfect quintessence thereof for the purification of the blood, and consequently for expelling the venereal virus, after having previously put a stop to its progress, and weakened its effects.

In the first and second parts, I give the preparation of a wonderful balsam, which I call *solar*, and which cures every kind of ulcer, expels every malignity and poison, both internal and external, whether on applying it externally on the ailing part, or taking it by the mouth with the proper vehicles. Then I recite the different sentiments of the authors, who have treated on the origin, the causes, and nature of the venereal disease: I expose, or lay

open their methods in the administration of mercury, which are reducible to two, at this day in use ; the one, is that of the extinction, which is the giving weak frictions, and at proper intervals from each other, in order to avoid a salivation ; the other is the giving strong and frequent frictions, and the raising a copious salivation. Both these methods I reject as insufficient for the cure of the venereal disorders ; yet however owning, that that of the extinction is by far the less dangerous, than that of strong frictions and abundant salivations, which curing never radically, ever cause at least the languor, and very often the death of the patient.

In fine, I give my method, I expound the motives thereto, and shew the happy efficacy thereof in every respect ; and thus I conclude the first and second parts.

In the third part I am to treat on the different venereal symptoms, as  
heat



heat of urine, gonorrhæa, shankers, bubo's, strangury ; to which we will add the scrophulous, rheumatick, ischiatic, &c. disorders. And as there are remedies specified, and a particular method for the cure of these different evils, which we may call partial pox, we will explain them here in particular, though our remedies proposed in the second part, and the general method for the preparation and administration of these remedies, are sufficient for a radical cure, not only of the compleat and complicated pox, but also of all its consequences, and all its forerunners, known under the different appellations that are given them.

However, to leave nothing more to be wished for on this subject, I will give a treatise on the quintessences drawn from the three kingdoms, which are so many excellent remedies for the cure of all diseases in general : and as I accurately teach the manner of treating and making these quintessences from the samples I use, that very thing

I may

may serve as a rule or direction for those who would work and draw quintessences from all the other mixts of nature : but I pretend not to be believed on my bare word ; judge yourself, Reader, of the matter, after having read, seen, and tried. This treatise, and the quintessences, will in like manner conclude the third and last part.

### Advertisement.

*Dr. JOURDAN DE PELLERIN, Physician-Chemist to the Most Christian King, in Little Wild-Street, near Lincoln's-Inn-Fields, his Name over the Door.*

T H E



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A

## PRELIMINARY DISCOURSE;

*Answering to the several objections made to the use of CHEMICAL PREPARATIONS, and proving likewise they are superior, and ought, in consequence, to be prefer'd to GALENICAL MEDICINES.*

**H**EALTH must be allowed to be the most important concern of natural life, and yet 'tis what the generality of men pay little regard to.

A modern poet, the abbé de Chaulieu<sup>a</sup>, tells us, that *good or bad health makes good or bad philosophy*; but I think it might be said rather, that *good or bad philosophy makes good or bad health*.

Violent and disorderly passions produce real alterations in our bodies, occasion diseases, and often death itself; tho' I do not pretend to infer from thence, that health depends absolutely on us, because many unforeseen accidents may deprive us of it: yet it must

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be

<sup>a</sup> The abbé de Chaulieu has published a collection of poems, written in a stile which is uncommonly strong, masculine, and nervous, and abounding in thoughts, which are remarkably solid and beautiful.

be granted, that either through a bad conduct, or want of care, we do occasion, prolong, and make worse, most of the miseries which afflict our bodies. I forbear to mention such excesses in debauchery, as fail not at once to ruin the constitution; to these a man cannot be given up, without becoming an avowed enemy to himself. What I mean is only, that we must not exhaust our spirits through a course of violent exercise, long abstinence, and too frequent night's revels; neither to benumb and soften our bodies thro' a constant indolence, by a nourishment too delicate and refined, or by forc'd and compell'd Sleep. Excess, either in care or neglect, is prejudicial to health. The cravings of nature must indeed be provided for, humours be work'd off by moderate exercise, and living in a regular manner. Our habitual or natural vices must likewise be forsaken, or at least mended: though this is mention'd, may be, but by form of advice, in order to prevent diseases. The advice, however, is but right, and worthy to be taken notice of, and follow'd, by every prudent man. The case is quite otherwise, 1. In those dangerous and hard distempers, which affect and overturn the whole constitution. 2. With chronic, habitual, and acute diseases, whose number is endless, and racking and intolerable pains do continually expose us to the loss of life; they sink and depress our spirits, render doctors advices unsuccessful, and ourselves



selves unfit for practising the maxims of both philosophy and reason.

And then we must apply to a physician; but the question is to chuse an experienced one, and one skill'd in our disorders, and proper remedies for a cure; for otherwise the doctor's knowledge of the disorder alone, without any at all of the remedy proper for it, would prove not only useless, but even dangerous and troublesome, and throw the patient into all the painful horrors of an anticipated death. And therefore as the knowledge of remedies constitutes one of the principal parts of physick, so the choice and preparation of them should be the study and attention of the physician. In order to this choice, the physician must be acquainted with the nature and composition of the *mixt*, from which the remedy is to be prepared, in order to disperse from it what may be contrary to the cure of the disorder, and much more to our constitution in general. And this happens but too frequently, on the account of the excrementitious and heterogeneous parts, with which all *mixts* are tainted since the fall, from that curse which the creator has denounced against the earth, incapable ever since of producing of itself any thing but briars and thorns, instead of those pure and delicious fruits which before it yielded man in innocence: for a remedy, in general, is only that pure part of nature, which, inducing a change on our constitution, disordered

and impaired by the malady, comes in to its aid, and gives it relief.

At the first reading of this definition, it will be found to be near the same with Galen's<sup>a</sup>, who, L. 1. *Synop. Facult. Med. c. 1.* says, *A medicine, in general, is every thing capable of altering our natural constitution; but yet our definition is much more just, as without the addition we have made, Galen confounds a medicine with a poison; both the one and the other changing our nature, the poison for the worse, and the medicine for the better. The principal quality of a remedy is, to be always conformable to nature; for, if it were not, it could not be contrary to the distemper; whence it follows, that a remedy should necessarily resemble the nature which it relieves and assists, and be contrary to the disorder which it attacks and combats. And hence those axioms of Hippocrates<sup>b</sup>, Contraries cure contraries, duly applied; like must be preserved by like; nature unites with, and delights in nature. Therefore*

<sup>a</sup> Galen was born at Pergamus, under the reign of the emperor Hadrian, about the year of Christ 131; he in some measure reformed all the sects of physicians, reputed then, and at mutual variance with each other. He settled a new plan, and, notwithstanding his protestations, to favour not one party more than the other, yet he follows Hippocrates's opinions in several points. He was one of those extraordinary genius's that improve every subject they treat on.

<sup>b</sup> Hippocrates was born in the island of Coos, and descended of Heraclides, according to Galen, or of Esculapius, as others pretend. Whatever be in this, the great Pythagoras was his master, who, working upon an excellent natural stock, formed him to the love of virtue, and the horror of vice: and being



fore 'tis the *pure* part alone, that is found in the *mixt*, which can form a remedy, by joining and working with the pure or sound part of our nature, in order to strengthen and fortify it, and thus in conjunction to attack, combat, conquer, and destroy the impure or unsound parts, which had caused the ailment: for the impurities, which remain in the remedy, to be administer'd, can neither join or work with the sound part of our nature, which is, what constitutes life and health; but must join with the impure parts, which have occasion'd the disease, and, in conjunction, attack our sound parts, destroy health, and bring on death.

Therefore it is of a very great consequence, in order to the choice of a good remedy, fully to know the true nature or composition of the *mixt* to be employ'd, that we may take that *pure* part of it which is friendly to our natural constitution, and reject the *impure* one, which is its enemy; a thing only practi-

B 3

cable

an enemy to pomp, and all worldly and sensual pleasures, he by an oath bound his scholars to a course of taciturnity, to modesty, meekness, and to a simplicity both in their manners and in their dress. This is what St. Jerome relates. He sought to re-establish the science of physick, which for near five hundred years, ever since the death of Esculapius, had lain neglected. Hippocrates was a person of a low stature, but handsome and well-made, and of a good mein, slow in his gait, pensive in his air, of few words, but deliberate in his speech, and extremely temperate: he lived to the age of ninety-five, was cotemporary with Eliakim, the prophet Malachy, Zeno and Socrates the philosophers, about four hundred years before Christ.

cable by the art of chemistry, as shall be shewn in the sequel of this discourse.

We readily allow, that the difficulty of making this separation of the *pure* from the *impure* parts, is very great; that to succeed in it, after having attentively consider'd the nature of the *mixt*, we must besides employ much care and application, much pains and assiduity, and even time and expences; *sed dii laboribus omnia vendunt*. Physick is the gift of heaven, and the physician is the minister of the Creator, destined for the preservation of mankind; but he himself is not dispensed from the general law, which adjudges man, in the acquisition of any good, either internal or external, of soul or of body, to a course of obstinate labour. And the more valuable the matter of our acquisition is, the more difficult the task proves. Every one readily allows these general maxims; but how few make the practical application of them to the particular subject we are here upon? A course of physick is gone through in the publick schools, where the instruction of the master, and the attention of the scholar, have equally an air of trifling and negligence. After this a degree is taken, and for some time the physicians in vogue are follow'd; their very gestures, even their air, are imitated; and decisions and prescriptions are made in their manner. Thus a course of practice is got into, a set of patients visited, and prescriptions given oftentimes without  
examining



examining the distemper otherwise than by the pulse; when bleeding and purging are immediately order'd, then coolers, apozems, and an uncommon regimen prescribed. It happens that some patients recover, many grow worse, a great number die; and the saying is, The physician cannot save life. This is the whole course of study, this all the application of a great many of our physicians; and these are the men, who have been justly exposed to the raillery, the criticism, and the censure of the Petrarchs<sup>a</sup>, the Montagnes<sup>b</sup>, and the Molières<sup>c</sup>, and of all men of sense and understanding; and yet these are the men who fancy and call themselves physicians,

B 4

ficians,

<sup>a</sup> Petrarch lived under pope Clement VI to whom, residing then at Avignon, he was in the year 1342 sent ambassador by the people of Rome. It was there he exhibited that beautiful poem, where he represents Rome under the emblem of a widow, warmly re-claiming her husband, and importunately inviting him home. It was here he celebrated his mistress the beautiful *Laura*, and the fountain of *Vaucluse*. He did not always confine himself to sing his amours; sometimes in his peevish humours he attacks both physicians and physick, tho', at other times, he has commended them. A great deal might be objected both to his inconstancy and censures.

<sup>b</sup> Montagne, a native of Bourdeaux, and mayor of that town; an author extremely witty and learned, but vain to a degree of puerility, for he takes care to tell us he kept pages in his service. His principles of morality are highly pernicious and loose. He indiscriminately falls foul of physick, without discerning the physician from physick.

<sup>c</sup> Moliere has excelled all both ancient and modern writers to this very time, in the surprising variety of his subjects, the beauty of some certain characters; in the fallies of his imagination, and in the delicacy of his plaifanteries. He has in the strongest colours painted every indecency, and every ridicule in life. He spared neither physicians nor physick, but exposed them in his pieces with an extreme severity. His  
language



ficians, and great physicians too, if their practice has got them estates. Surely they are not the men whom the Wise-man means, saying, *Honora medicum propter necessitatem.*

But if Europe unhappily abound in many of this character, she may also boast of many others, who, by their profound knowledge of nature, are by their unwearied application an honour to the profession, restoring to perfect health patients that are labouring under the most uncommon and hazardous distempers. Such physicians, far from amusing the sick with idle and vague discourses, consider and endeavour to inform their minds by getting a thorough insight into the nature of the case before them, in order to restore to strength and vigour such as, being worn out either by a course of excesses, their own natural weakness, or even by the use of bad medicines, are, from their weak and languishing state, under the dreadful apprehensions of their approaching fate. Such physicians have often  
snatch'd

language sometimes falls short of his thoughts, as his expressions being forced, are yet less natural. He generally succeeds better in prose than in verse: Besides, he gives a turn of delicacy to vice, and to virtue a forbidding austerity. Finally, in some of his pieces he strangely falls short of himself, ceasing to be that excellent author of fine sense, and commencing the ape and mimick of Plautus, in his obscenity and buffoonery, in order to gratify the vicious taste of the lowest vulgar. 'Tis with justice then Boileau says of him,

*Dans le sac ridicule, où Scapin s'enveloppe,  
Je ne reconnois plus l'auteur du misanthrope.*

He excelled as an actor no less than as an author, and expired acting the *malade imaginaire* in the year—He was a Parisian born, and the son of a valet de chambre upholsterer to the king.



snatch'd from the jaws of death, patients whose life had been endanger'd or given over by others. In fine, they have answer'd every expectation of the sick, and deserved the acknowledgments and applauses of the publick.

What I just said on the subject of physicians, and the nature of remedies in general, on the application and labour necessary, in order to make a good and a genuine remedy, sufficiently shews my opinion, that chemical preparations are preferable to the vulgar sort. This both Galen himself and Hippocrates would have agreed, had this commendable art been practis'd in their days. Of this we may judge by what Hippocrates says, *L. 1. De Dieta*, where, speaking of the labour some people employed on gold, he hints, he had some confused notion of its solution and reduction to a quintessence, which he does not disapprove. And Galen, tho' entirely ignorant of the practice of chemistry, has however, by the mere dint of his genius, been sensible of the advantages accruing from it, when he says, *L. 11. Symp. Med. c. 11.* “ that the fine and subtile parts in remedies  
“ have greater efficacy, on account of their  
“ greater degree of penetrancy, than the  
“ coarse and gross parts, notwithstanding  
“ their being endowed with the same qualities.” Consequently, he so earnestly wished to find out the means of separating from the substance of wine its hot and ethereal part, because, says he, it would then prove more  
efficacious.



efficacious. 'Tis then doing Galen's merit no injury, neither despising his knowledge, to prefer the chemical preparations to those of his school.

Chemistry, which is a science the most extensive and exalted of all others, since it alone displays nature to our view, and lays open her most secret springs, tho' coeval with the world, was at first known, and that after the deluge, to the patriarchs only, who transmitted it orally to the heads of their families, in order to maintain its dignity, and prevent the abuse which the bulk of mankind might have made of it, by being given up to passions, and hurried away by lust. Towards the year of the world 2341, Hermes Trismegistos<sup>a</sup>, king of Egypt, cultivated this art with care, and transmitted it in writing to  
the

<sup>a</sup> Hermes, or Mercury Trismegistos, *i. e.* thrice great, was the name the Greeks gave him, vulgarly speaking, Bhot or Siphos; he was the second king of that name among the Egyptians. He was the greatest prince they ever had, both as to the sublimity and extensiveness of his knowledge. He has treated on all the sciences, and was, as it were, their father. He lived about 1900 years before Christ. Ptolemy Philadelphus employed Manetho in translating his fine works into Greek, but unhappily both copy and original are lost. There are only some fragments of him remaining, and these very defective, but however so beautiful, as to make us sensibly regret the loss. He reigned fourteen years only; 'tis supposed he abdicated the throne, and retired from the world, to give himself up, with more leisure, to the study of nature, and the contemplation of the Creator, equally despising human grandeur with its cares. This prince was the most accomplished pattern both for justice and piety; and as subjects commonly affect to imitate the manners of their sovereign, the Egyptians surpassed all others in science and in wisdom. According to the testimony of Scripture, upon that account, Moses was instructed in all  
the



the Egyptians, in an enigmatic and parabolical manner, not to be communicated to the bulk of the people, or even all the great men, but only to the priests and the eldest of a family ; or to those who, by their approved virtue, should be judged worthy of such a gift, and capable of so sublime a knowledge.

'Twas not before the year of the world 3537, that Democritus <sup>a</sup> conveyed this art from Egypt into Greece ; that he made use of it, and applied it to the purposes of physick. He is the first who understood the business of distillations ; and hence physick was, in former times, practised only by priests, princes  
or

the knowledge of the Egyptians, *Exod.* xxxii. 20. 'Twas in Egypt, therefore, where the Israelites learned the art of chemistry ; and from the Egyptians it came to be derived to the Greeks.

<sup>a</sup> Democritus. It would carry us too far, in order to decide of his character for talents and wisdom, to mention the many voyages Democritus undertook, and the sciences he excelled in ; it suffices to know, that Socrates, after the interviews they had together at Athens, looked upon him as the greatest philosopher of his time. Democritus lived about 500 years before Christ. Tho' he neither had, nor could have above one father, yet authors are divided as to this circumstance, giving him three or four : but they agree that he was illustriously born at Abdera, a maritime town of Thrace, on the Egæan sea ; that his father having spent his whole estate in the service of Xerxes king of Persia, that prince, from an attention worthy of a king, had him brought up, and intrusted his education to the magi, the philosophers of that nation, and particularly to the great Ostanos, who was the chief. After having surpass'd all the expectations of his masters, he had still a desire to attain to greater degrees of knowledge. He went into Egypt ; and to prevail upon the priests of that nation, the depositaries of sciences, to intrust him with all their mysteries, he caused himself to be admitted amongst them. There he became fully instructed in the hermetic art.

or kings, or other great men: so that this science, which of all others is the most ancient, was, so to speak, the last that was diffused in the world, tho' always understood, and always practised by a set of select philosophers, many of whom were princes and men of a consummate virtue, and a refined wisdom; and even at this day it is not known in its full extent but to a few persons of discretion.

This science, which is also an art, has successively made a considerable progress, in regard to the skill of conducting the operations, as may be seen upon a comparison of the ancient with the modern philosophers writings.

The person, who extended its practice most, for the service of physick, was Paracelsus<sup>a</sup>. But he is little understood, though many pretend to follow his maxims. A man must have abilities and knowledge above the common, to get an insight into these mysteries. And if his writings were to be taken in their plain, literal meaning, ne'er a common journeyman-barber or apothecary, but would become a great physician and learned philo-

<sup>a</sup> Paracelsus was born at Linsiedelin, near Zurich, in Switzerland. Never man had more enemies, and never was man more severely censured; never man had so many followers, and was more admired than he. 'Tis from the different view, in which the same man is considered, that opinions so opposite proceed. His commentators and interpreters have mangled his works, which every one is not happy enough to understand.



philosopher. Arnoldus de Villa Nova<sup>a</sup>, Raymund Lully<sup>b</sup>, and some others, had treated physick before Paracelsus in a chemical way, but in a manner less extensive and more involved.

The

<sup>a</sup> Arnoldus de Villa Nova. After all our enquiry into the country of this author, we may determine it to be in Languedoc. He studied physick for twenty years at Paris, and ten at Montpellier. He went through all the universities of Italy and Spain, and every where gave proofs of his uncommon abilities. 'Tis allowed he had the secret of the philosopher's-stone, and could make gold that should abide every test. Whatever be in this, he has the advantage of having writ with greater clearness and perspicuity than any other philosopher. He perished at sea in his passage from Italy into France, going to wait on pope Clement V. who ask'd for him thither. He lies buried at Genoa.

<sup>b</sup> Raymund Lully. I should be glad to be able to relate all the curious acts of the life of this surprising author, but it would be to exceed the limits of a remark. I shall content myself with a short abstract. He was born at Majorca in the year 1235, of an illustrious family; he became the favourite of James I. king of Arragon, whose great seneschal he was. Though married, and the father of three children, he fell in love with Ambrosia de Castalo, whose least merit was, the being the most consummate beauty of the kingdom. Raymund's passion was so violent, that it put him upon many extravagances. Ambrosia could think of no way more effectual to cure her lover, than by granting him an assignation, to expose to his view a cancerous breast she laboured under; when thus she addressed him, "See here, and judge, if this wretched  
" carcase be worthy of your regard and eager pursuit; change  
" the object of your passion, and raise your thoughts to some-  
" thing nobler far, and pursue what alone is worthy of a Chri-  
" stian." This Sight less affected the eyes than the heart of Lully; he instantly became a convert, and falling down at the foot of a crucifix, made a resolution to propagate the Gospel, and labour the conversion of infidels. He undertook many voyages, became acquainted with Arnoldus de Villa Nova, who from the strict friendship that was between them, taught him physick, and the *great work*. Raymund being invited into England by Edward, under a promise of entering into a war for the recovery of the Holy Land, if our philosopher would sup-  
ply

The nature of this practical science, with regard to physick, is to purify the matters which are to form the composition of medicines ; to extract from the very heart of *mixts* the pure part which is there closely confined, and give it separated from the impurities which accompany it ; for if we were to administer the *mixt*, rough as nature yields it, and as do those who are acquainted only with the vulgar methods of preparation, we should run the risk of doing more harm than good, considering the pure part is very small in quantity, and the impure very copious ; and thus the disease would be rather increased than alleviated.

It is not to be doubted but *mixts* are tainted, that is, intimately blended with much heterogeneous parts, and even parts opposite among themselves, which form the refuse and malignity, in which they abound, some  
more,

ply him with the necessary money ; he had an apartment allotted him in the Tower, where he worked and made about twelve millions of gold in our money, pieces of which were coined and called rose-nobles. Some of these pieces are still to be seen in the hands of the curious, and the gold of them is allowed to be finer and more perfect than that of the Jacobus's. The avarice of Edward having no bounds, Lully made his escape from Westminster, and went to Jerusalem, and from thence to Barbary, where, in the close of June 1315, aged 80 years, he receiv'd the crown of martyrdom. His body was conveyed by Genoese merchants, and buried in the church of St. Francis at Parma. The labours of Lully may pass for prodigies above nature. As it seems inconceivable, how a man, who compiled upwards of 500 volumes, so extremely well, and on subjects the most abstracted and difficult, could have travelled so much. As to the rest, I have advanced nothing but upon the credit of history and the most authentic writers.



more, some less; and which proceed from the defect of proportion in the principles of the component elements, which we may call the principle of death, the just punishment inflicted on Adam, the head of the creation, who, attempting to withdraw himself from the allegiance of his Creator, would set up for independency and immortality.

Now if these impurities and imperfections of nature can be removed by chemistry, what art shall have corrected will doubtless be more perfect, than what nature shall have produced.

Art at first borrows from nature herself every perfection she is possessed of; and as the most perfect part of nature is ever tainted with some imperfection, art must remove it. Thence these perfect parts, originally vicious before, come to appear in all their beauty and perfection, by the application of art.

From this consideration we can give a Reason, why all the remedies which nature furnishes, how good soever, or how mild and gentle, or violent and strong, naturally contain something inconsistent with the nature of a perfect remedy, and which retards and opposes its operations and effects; a thing easily observable in rhubarb, for instance, which contains a certain earthy and dry portion, which is opposite to the nature of a remedy, and weakens, or even sometimes quite destroys its force and effect: for this earthy and styptic matter is entirely opposite  
to

to the fine, aerial substance residing in rhubarb, and alone containing the purgative quality. In like manner, in hellebore, coliquintida, and scammony, there resides an acrid, pungent, and caustic substance, which acts so strongly on the stomach and intestines, as often to cause such dangerous inflammations, that physicians, who have not the skill to correct these bad qualities, and change the substance of these bodies, meet with great difficulty in the cure. In antimony and mercury there is also lodged a crude, indigested matter, which produces great disorder in the animal oeconomy, unless we have the skill and precaution to effect its removal. But if by means of chemistry we separate these noxious matters, we procure a set of excellent medicines, which shall with safety and success produce surprising and infallible effects, in the perfect and radical cure of the most considerable and obstinate diseases.

We may then boldly conclude, that chemical preparations are preferable to the common and galenical, which cannot, even attempt not, to make the necessary separation of these heterogeneous matters, which nature has lodged in all its compounds, and are so opposite to the salutary effects expected from them; since these salutary effects cannot be, as was shewn, but by the purer parts of nature, which constitute the principle of action, and the source of life; which, to be able to act in our favour, ought to be drawn forth

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from



from their confinement, and afterwards wash'd and freed from every impurity which weakened and impaired their action, and altered their efficacy; and this is what chemistry alone can do, and infallibly effects, when conducted by a genuine disciple of the profession.

But let us not dissemble the objections which are made to this doctrine, but rather set them in their full vigour, and strength, and light; and add, if possible, new force to them; as in that case the victory will be more compleat, from the full answers which we shall give to them.

Objection I. Our forefathers, who had not the use of chemical preparations, succeeded in the cure of diseases, as well, if not better than we do; and at this day physicians perform surprising cures without the aid of chemistry, or exposing the patient, by the operation of the medicine, to the hazard of his life; a hazard almost always attending the administration of chemical remedies, which the prudent physicians never venture upon, but when the patient is in a desperate case, and at the point of death; and then their great and sudden violence produces such alterations and disorders in the body, that if the constitution can bear out that shock, it may sometimes recover; but, out of a desperate and mortal case, it seems, we should not venture upon the use of remedies always violent; tho' sometimes the violence, which is natural

to them, on account of the great fires and quantities of fuel employed in all chemical preparations, does not shew itself at first, it acting but the more surely, and with the greater danger, by its pungent acrimony, which, falling on the bowels, corrodes and destroys them; when a necessary and sudden death ensues, preceded however by the most acute pains.

Answer. The objection offered here, can only be considered as a witty conceit, at least as to the second part, which contains only a declamation, all the articles of which are false, against chemical remedies; or it has been started by a person entirely unacquainted with solid and genuine chemistry, or whose knowledge in this art rises no higher than to that of some mean and poultry pretenders. But whatever be in that, and from what quarter soever it comes, we shall answer it with the same degree of seriousness, as if these difficulties had never so much foundation.

The first part of the objection falls upon the frequent and perfect cures of the most considerable diseases performed both by ancient physicians, and by modern at this day, (as it is pretended) without any danger or bad symptoms, by galenical remedies alone. The supposition wants only a little truth, to give it an air of seriousness. Every one knows, and the most zealous followers of the ancient and erroneous methods must allow, that a considerable number of diseases, formerly,



formerly, and at this day, reckoned incurable by the use of the ordinary remedies, do always easily yield to chemical medicines; such are the diseases of the liver, spleen, and hypochondria; such is the pox and the scurvy, the gout, the epilepsy, œdematous tumours, &c.

As to the safe and easy cures effectuated by galenical remedies in the capital diseases, no man sure can have the face to maintain it; and I appeal to the judicious publick on this head.

The second part of the objection, with regard to the violence and extreme danger attending on chemical remedies, can only rest upon what has perhaps been observed, or learned, from the effect of certain remedies ill prepared by an ignorant pretender to chemistry; who, without any knowledge of nature, without principles, and without knowledge and capacity to distinguish what ought to be retained, and what rejected from the mixt; how the separation of substances should be made; how the pure parts which are extracted from them, in order to be kept, are to be treated, brought to perfection, and exalted, and their virtue and efficacy put into act. By such a one, I say, who without this necessary knowledge has had the presumption to fancy himself a chemist, and the dishonesty to make himself pass for one, and consequently will be so rash as to put forth his profane hand and touch the ark, and ad-

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minister,

minister, as a remedy, what by his work he has turned into a poison only. 'Tis not every kind of calcination, putrefaction, solution, sublimation, combination, &c. that are truly chemical operations; to entitle them such, they should be prepared and conducted thro' the knowledge of nature, discernment, and attention. These operations should be performed by a skilful and experienced hand. 'Tis only of these chemical remedies we undertake the apology, and the use of which we propose in preference to all others, because we in effect know, that they are the only ones capable of curing the capital and more considerable diseases, especially the chronic and inveterate.

Never, for instance, will antimony or mercury, so violent, so dangerous, and of themselves so pregnant with poison as nature presents them, or as an unskilful hand has work'd them, do any harm; nay, they will never fail to produce surprising effects, if duly prepar'd according to the rules of art; they will then prove a sure remedy in the radical, speedy, and easy cure of a great many diseases, which cannot really be cured by any other known remedy. We may almost affirm the same thing of the preparation of other metals and minerals. Nothing, therefore, is more unreasonable than to condemn a remedy, because an ignorant pretender may prepare it ill. And where shall we find the science or art which  
is



is not obnoxious to censure, if the abuse thereof were a sufficient foundation for it?

I shall not stay to answer to the consequence, and to the cause of these effects, which the objection supposes; I mean, the violence and the causticity of chemical medicines, and the erosion of the bowels produced by them. What has been said above, on the object of chemical operations, too clearly shews the absurdity of the objection. As to the great fires and quantities of fuel employ'd in chemical operations, nothing can be more childish and less applicable to the genuine operations. It would be swelling out the answer too much, to say any thing further about it. I conclude then with charitably acquainting the objector, to retrench one particularity, which cannot fail to shew his little knowledge in the nature of common fire, and in that of the matters it changes and destroys; his gross ignorance in the nature and effects of chemical fire, and in the conduct and application of both these fires by the philosopher. *We ought never, 'tis said, to administer chemical remedies, but when the patient is in a desperate case, and at the point of death;* and then the chemical remedy will not suffer in its reputation, should the hopeless patient die. And, on the contrary, if after having taken the remedy in this extreme languor and weakness, and when the patient is just on the brink of the grave, in a state, wherein it is allowed, that the ordinary remedies can be



of no service, it must be granted, that chemical remedies are infinitely preferable to the galenical.

Objection II. In points of such consequence as are the life and health of man, 'tis the height of imprudence and rashness, to go about to set up a new method for the cure of diseases, by giving the preference to a quite upstart art, the invention of Paracelsus, before all the writings and practice of the most learned physicians and masters of art.

Answer, Tho' the case were, as really it is not, that chemistry was a novel art, and that Paracelsus was the first who employed it in physick, we could however make use of it, without rashness and imprudence, if good and useful in itself; its novelty would take from it nothing of its merit, but rather engage us to examine it more fully to the bottom; for what one single art is there, which may not arrive to perfection, and actually arrives thereto, in length of time? We reason and we experiment, at this day, on the reasonings and on the experiments of our predecessors; we avail ourselves of their discoveries, and enrich them with our own; what they could not examine thoroughly in the period of a short life, they have bequeathed to the discussion of their successors, and thus down to us, and from us down to our latest posterity; for the depth of nature is such, her wonders so numerous, that the whole course and series of ages will not suffice

fice to exhaust her in any one of her works: like her Author, the impresson of whom she bears, she is, so to speak, infinite, and consequently ever susceptible of increase in each of her parts. But to shew that Paracelsus is not the first who admitted and made use of chemistry in the composition of remedies, we here give the opinion of many unsuspected authors, who have approved of the use of chemical medicines, and who have employed this art in the practice of physick long before Paracelsus.

Not to mention the ancient priests and philosophers, or magi of Egypt, Chaldea, Persia, and Arabia, who knows not that the great Raymund Lully, the learned Arnoldus de Villa Nova, and many others, both before and since that time, have treated physick chemically with success and applause; and, from their chemical preparations, have composed surprising remedies, for which they have gained immortal honour, as appears from their writings, which are in the hands of every body.

I might confine my answer to what I have already advanced; but as the question is about extirpating an error so prejudicial both to physick and the world, let us set matters in such a point of light, as that it may make no impresson; and let us utterly root it out.

As the anonymous author, a declared enemy to chemical medicines, calls himself a member of the faculty of Paris; and as he  
seems



seems willing to shelter himself under the authority and laws of that illustrious university, let us proceed with him in the same manner as did the young shepherd David, who made use of Goliath's own Sword to cut off his head; that is, let us make use even of the maxims and decrees of that famous body, and of the method taken by its disciples and followers, in order to establish our own method firmly, and beyond the reach of all censure and criticism.

Fernel<sup>a</sup>, who holds the chief rank among modern physicians, had chemistry in high estimation, and made use of it himself with success.

Mathiolus used the spirit of vitriol and antimony chemically prepared; and in his letter to Andrew Islau, he not only approves of chemistry, and cries up its surprising effects, but he likewise says, that no one can be a compleat physician, not even an indifferent one,

<sup>a</sup> John Fernel was born at Amiens in Picardy. In his lifetime, and even before his fall, he saw the different treatises which he had written on all the parts of physick, read in the publick schools. He acquired a high reputation and fortune. He was called to court to wait on his majesty Henry II. who honoured him with the place of his first physician; in which post he acquitted himself so well, that by the use of his medicines the queen became fruitful, which gave occasion to the birth of several Princes. After so many signal Services done his country, the great Fernel, being already pretty much advanced in years, died of grief for the loss of his beloved wife, who had suddenly departed this life on the 26th of April 1558; which gave occasion to the following epigram:

*Quand la mort m'eut ravi la moitié de moi-même,  
L'autre moitié suivit son aimable moitié,  
Dans la possession d'une gloire supreme,  
Je fis ceder ainsi la gloire à l'amitié.*



one, if he be not acquainted with this noble art.

Craton, who was physician to three emperors, in the consultations which Scholinus has published, very strongly recommends chemical medicines, and assures that he had made use of them to very good purpose.

Even Eraſtus, the great Stickler againſt Paracelfus, in the preface to his antiparacelfian works, avows, that he does not at all diſapprove of Paracelfus's chemical preparation of medicines; on the contrary, he commends it very highly.

John Riolanus, a very ſkilful expounder of phyſick, after having, by order of the faculty at Paris, undertaken to confute the pretenſions of Paracelfus's diſciples, ſays expreſſy, that the univerſity, which furniſhes the moſt able phyſicians in Europe, gives free leave to uſe chemical medicines, provided they no wiſe impugn the ancient rules of Galen and Hippocrates.

To prepare medicines chemically, is no deviation from the rules of Hippocrates and Galen, ſeeing the former did it himſelf, as we have already ſhewn, and will farther make more plainly appear in what follows. If in Galen's days chemiſtry was quite unknown, or but little uſed, it does not follow from thence, that in our day we ought to reject it, ſince its uſefulneſs and excellence we perceive. May not thoſe who have come after Galen, and may not they who come  
after

after us, add whatever may contribute to the ornament and use of an art which is well known? Is it not in the same manner that we make use of several medicines which our forefathers were ignorant of, as senna, rhubarb and cassia, which are certainly preferable to tamarins, colocynthida, and the like?

But besides, do we not find the principles of chemistry in the common preparations of medicines; for they are all prepared, according to the galenical method, either by heightening, lessening, or altering them; for in medicines we require either the matter, or the qualities and virtues separated from that matter; I say, we *require the matter* for incrustating, astringent, and detergent medicines; and *the virtue alone* for attenuating, diaphoretick, and purgative ones, because the grossness of the matter is an obstruction to their efficacy; wherefore Mesue, Boerhaave, and all good authors, distinguish four kinds of process, namely, coction, lotion, infusion, and trituration. Pray then what is lotion, and chiefly assation, but the beginning of a calcination? and what is infusion, but an extract begun? But chemistry excels in this manner of separating the matter from its qualities, properties, and virtues; for it separates in different ways the pure from the impure, and consequently draws and opens the different virtues of medicines, which would otherwise lie dormant, as it were, and could never be extracted therefrom by the natural heat;



heat; a thing that is well known, especially in metals and minerals.

Moreover, it boils and attenuates earthy substances, it alters their malignant, venomous, and heterogeneous qualities, or it entirely divests them of these; and it heightens their virtues: for there is more force and virtue in spirit of cinnamon, against a syncope and other disorders, than there is in cinnamon itself. Distilled oils, spirits, salts, and sulphurs, have much greater efficacy than even the simples which they are extracted from.

In fine, it is incontestable that chemistry renders several medicines more pure, more analogous to our nature, and includes, in a small volume, different forces and virtues, consequently more adapted to the end proposed, and the duty of a physician, which should be to cure speedily, infallibly, and agreeably; which will much better answer to his purpose, by making use of chemical medicines, the virtues of which are by far more active, perfect, and pure, and less repugnant to a patient.

Expert chemists have a great many mild and salutary medicines, which are not violent; those which I have made publick, under the name of the late M. de Grimaldi, first physician to the king of Sardinia, hold, without dispute, the first rank, as well as those which I now offer to the publick in this treatise.

The *materia medica* is the same both in the chemical and common pharmacy ; it is taken from vegetables, animals, and minerals, as well in mild medicines, as in those that are strong and violent, which are used in physick ; but the chemical preparation corrects and takes away all that is noxious in violent medicines, renders them more infallible, and more agreeable, for the reasons I have already given ; and often, according to the doctrine and practice of the Galenists themselves, it is necessary to use the strongest medicines, in order to cure a great many disorders ; a thing which cannot be done by the weakest remedies. Hippocrates, Galen, Celsus, and several others among the ancients, made use of more violent medicines than what true chemists are wont to do ; *extreme remedies*, says Hippocrates, B. 1. Aph. 6. *are proper for extreme disorders* ; and Galen himself, 5, Meth. ch. 15. blames Erasistratus for using light medicines, and for pretending that these were hurtful in dangerous diseases, in which if one miss the opportunity, a thing which may easily happen, either the patients die, or their distempers become incurable. It is therefore the more usual way for galenical physicians, that is, for such as follow the ancient method, to make use of very strong medicines, than for chemists, who seldom use them, and who prepare them better : nor is it an assertion any more true to say, that chemists prepare all their medicines with a strong



strong fire; for very often they use but a very gentle one.

But when they use an open fire, and for fusion, the compound body, upon which they work, requires it; and herein they act conformable to right reason, sound physick, and the maxims of Galen, who teaches, that by means of a strong fire several medicines lose all their acrimony and pungency. It is certain, that, by the spagyrick art, the most violent medicines are softened, and that a great many, which are even poisonous, lose their destructive quality. Chemistry, farther, furnishes with cardiacks and strengthening medicines of the first order, very far superior to the common sort; a thing which but few people deny.

I shall conclude this answer with a reflection of a very able<sup>a</sup> physician, who does not pretend to praise other men, but who, on account of his fine learning, and the good use he makes of it, very well deserves to be praised himself. “ Custom, says he, ought not  
“ to be the master-guide in the therapeutick  
“ art; let it not displease these pretended  
“ sages, this is a privilege which I do not  
“ allow it, since I do not own it for the  
“ only guide. Would not one say, to hear  
“ them talk, that there is an established cu-  
“ stom,

<sup>a</sup> M. Procopius, in a letter written to M. Chicoyneau, first physician to the king, December 14, 1747, on the great and surprising cures performed by M. Daran, surgeon in ordinary to the king, in disorders of the urethra, inserted in the treatise of observations on this malady, published by M. Daran himself.

“ stom, a fashionable manner of treating pa-  
 “ tients? and that medicines are only pre-  
 “ scribed, because they are customary things?  
 “ No: far from it; it is because they are ne-  
 “ cessary, and are fit for the distemper, that  
 “ they must be prescribed; for the custom  
 “ of using a remedy does not constitute its  
 “ goodness and necessity; but its goodness  
 “ determines its use.”

Experience shews, that we use a great num-  
 ber of remedies that were not known to the  
 ancients. The emetick (a chemical medi-  
 cine) which may be reckon'd one of the best  
 in physick, would never, should this princi-  
 ple be scrupulously followed, have recovered  
 itself from the sentence pronounced against it  
 by Guy Patin; but happily it has been ap-  
 pealed from, and justice has been done it  
 upon the appeal.

In a word, it is often prudent to follow  
 a new method in the cure of diseases; it is  
 very lucky for us, that the one we propose  
 is the most infallible, the most expeditious,  
 and most agreeable.

In fine, let us in some sort conclude this  
 maxim with what the Wise-man says, Eccl.  
 xxxviii. 6. *He hath given man skill, that he*  
*might be honoured in his marvellous works:*  
*with such doth he heal [men]; and of such*  
*doth the apothecary make a confection; and of*  
*his works there is no end:* for physicians will  
 discover every day new remedies, and their  
 art will never be limited.

Objection



Objection III. Medicines taken from minerals, and metals, should never be used; as the greatest part of these compound bodies are tainted with arsenical particles.

Answer. Another reason, as weak as the preceding, raises apprehensions about chemical medicines, as people believe that they are made up from minerals and metals; but, as we have already observ'd, the matter in chemical and galenical operations is the same; and it will be a very easy thing for chemists to administer vegetable medicines to their patients, should the mineral ones be contrary to their case: besides, the ancient physicians made more use of metallick medicines, before the practice of chemistry was introduced, than is done at present; for there are a great many chemists who seldom use these; and when they use any, they are vegetable medicines only. Upon perusing the writings of the ancients, we find that they were wont to use steel, calcined copper, and other metals, either without, or with but very little, preparation: plates of unprepared brass purge strongly, of which Dioscorides makes mention in his fifth book. A great many made use of Armenian stone without any preparation. The same Dioscorides also writes, that silver is good against the poison of ratsbane. The most celebrated authors, both ancient and modern, agree, that from this metal may be drawn specifick remedies for disorders of the head.

Avicenna <sup>a</sup> says, that it is good against palpitations of the heart. Mathiolus, in the letter already quoted, assures, that dangerous and chronical distempers can hardly be cured without metallick medicines; and that they should not be administered without a chemical preparation. There is nothing more common than the use of mineral waters, which have all a metallick quality.

I could easily adduce the opinions of the most celebrated authors, who are constant followers of this doctrine; but, to be brief, we will confine ourselves to make a few reflections; and, to avoid repetitions, entreat the reader, if he desires a more ample explication, to look at what we have already said in our treatise on metals, published and sold at Durand's, bookseller in Paris, at the sign of the griffin in St. James's street; in which I treat of their formation, the qualities, virtues, and properties of each in particular, for the use of physick; I point at the medicines which may be drawn from them, to be employed in particular disorders; and likewise  
purpose

<sup>a</sup> About the end of the tenth century, Ebn Sina, that is to say, Avicenna, was born at Boccata, the capital of the province of Cherofan, in the 370th year of the Turkish hegira, or 980th of the christian æra; endowed with a quick and ready genius, he made great progress in the mathematicks, and even in the most sublime philosophy; therein he became perfect at an age when others hardly begin to study them. He was no more than sixteen when, from these sciences, he fell into that of physick, in which he succeeded with the same rapidity. He was in so great repute for physick and philosophy, that the sultan Magdal Doulet thought he could do no better, than put so acute a genius at the head of his affairs, and so made him his prime minister.



purpose the method of working them ; and therein I prove, that the medicines which are drawn from minerals, and metals, are preferable to those which are drawn from vegetables, and animals. As truth is always the same, and as I want no more but this very truth to establish my principles, I will repeat, as an answer to the above-mentioned objection, the same reasons I set forth in that work.

Tho' vegetables, and even animals, be not less proper for the composition of excellent medicines, than minerals and metals are, as the one and the other derive from the same origin, and as the different canals through which they pass are alike pure ; and as it may even be said, that vegetables seem to have the advantage over minerals, because they are naturally destined to serve as aliment for animals ; and that their texture being less strong, and less compact than that of minerals, their resolution may be more easily performed ; moreover, the spirits of vegetables seem to have more analogy with those of animals, than the spirits of minerals have, on account of the predominant principles of the one and the other ; and we likewise find, that almost the general opinion gives the preference to the juice of plants, to the extracts of roots, to the virtues and qualities of simples, above all other medicines : But unhappily experience does not answer to this favourable opinion ; nothing is more rare, than to find a

good and true remedy, for the great distempers, drawn from any other quarter than from the mineral kingdom.

Whence then can arise all that opposition, considering the daily experience we have of the weakness of these medicines; in which, we scarce find any of the virtues ascribed to them?

The fault certainly is not in the mixt, but in the person who works it, without having a perfect knowledge of it, without preparing it according to the principles of its nature, and the quality of its composition.

But let us throw more light upon this matter, and succinctly explain, in what respects the three kinds agree, and in what respects they differ.

All the mixts in nature are divided into three kingdoms, to wit, the animal, vegetable, and mineral; each kingdom is divided into species, and each species into individuals. All these kingdoms have the same first origin, and derive from the same source, to wit, that universal seed formed from the pure spirit of the elements, impregnated with the light of the heavenly bodies, and the influences of the stars, which, darted down from above, are gathered together and united in the centre of the earth, where is made the first preparation, that serves either for the formation or generation of all the mixts in the three kingdoms.

But



But each portion of this seed, which in the beginning is but one, and universal, is divided, and necessarily, and without alteration, determined to one particular *genus*, whether vegetable or mineral; so that the one may be changed into the other, if it be not wholly reduced into its original simple principles, at which human art can never arrive; for all that this can perform is, to reduce the mixt into the principle of its proper *genus*, which is determined to perfect its species and individuals.

Wherefore art will never succeed to make a mineral out of a vegetable or animal, nor an animal out of a mineral or vegetable.

The reason of this is, that the portion of the pure elementary part, which is determined to one kingdom, becomes so by the infusion of spirits, both fixt and volatile, which by their nature are peculiarly adapted to one particular kingdom, and not to another.

But these spirits, having once taken possession of a portion of element, never quit it to give place to spirits of a different nature; and all that happens in the resolution of the mixt, which is brought about by its putrefaction, from whence arises a new generation, is this, that the spirits, which did animate the first composition of the mixt, are driven away by spirits of the same nature, which are stronger and more powerful than the first.

Yet these first spirits still remain in part, but weakened in force and quantity so far, till in this mutual struggle the second spirits

gain ground by little and little, seize upon the place, and entirely drive out the former occupiers; whence arises a mixt of the same kind, but stronger and more perfect than the preceding, after it has been destroyed; a thing which does not happen but by degrees.

Thus, in the putrefaction or resolution of the mixt, one can never arrive at the original or universal matter; since the spirits, that have determined it to one particular kingdom, never quit it one single moment, not to give an opportunity to those of a different nature to seize upon it.

That which makes the distinguishing difference between the three kingdoms, both as to their spirits, and as to their material parts, in their pure elementary one, whether fix'd or volatile, is the different proportion of their constituent elements; for instance, in the animal kingdom, air and fire are predominant over earth and water; in the vegetable kingdom, air and water are predominant over earth and fire; in the mineral kingdom, water and earth are predominant over air and fire. From this different proportion arise the different qualities which we perceive in the resolution of the mixt.

For example, in minerals, their spirit or volatile part is acrid and acid, because air and fire, which produce sweetness, are therein in least quantity; and their fixt part, or fixt salt, is sharp and bitter. In animals and vegetables, the volatile part is sweet, and agreeably relishing



relishing to the mouth and palate; and their fixt salt is only pungent and saline.

From thence must be concluded, 1. That a pure mineral requires more working, more rectifying, and a longer coction, than the mixts of a vegetable and animal kind; but that these last are more tender and delicate to treat, and are more difficult to be kept pure, on account of their greater degree of volatility.

2. That excellent medicines may be drawn from the one and the other, provided one knows how to work them, and proceed therein according to the nature of the mixt which is to be work'd: yet that the medicines drawn from minerals are certainly more powerful and more efficacious than any other, for the cure of the great disorders, for the preservation or prolongation of life; because these are naturally more fixt, so as to bear with greater and more perfect rectifications, and more coctions than those drawn from vegetables, the pure part of which, as has been already observed, evaporates by reason of its too great volatility.

In order to remove all scruples, and satisfy all the doubts that may be raised about the use of metals and minerals in physick, and the preference which we give to the medicines drawn from them, especially for the cure of the great disorders, above those which are drawn from vegetables and animals, it seems proper here to lay open what differ-



ence there is between medicines, poisons, and aliments.

Aliment, is that pure part of nature, which is found in any thing that is destined for our nourishment, and which, taken inwardly, repairs the pure part of our nature, the radical moisture, whether consumed by the natural heat, or dissipated by the agitation of our spirits, and the violent exercise of our bodies ; that, by such repairs, our being may be preserved in its state of life and activity.

Poison, on the other hand, is an excrementitious impurity, contrary to the pure part which supports us, found in the mixt which we use, and which destroys and dissipates that pure part which constitutes and preserves life and health ; so that poison may very well be defined, by saying, that it is any thing that destroys and dissipates the foundation and basis of life, by means of a quality contrary to that which maintains and repairs it.

Thus, when we say that poison is nothing else but the impure part found in the mixt, we give to understand, that all that which is contained in the poisonous mixt is not poison, but only what is contrary in quality to the pure part of nature, to be so ; and when this impurity is predominant, to a certain degree, we justly call that mixt a poison ; which will be more or less strong or dangerous, according to the quality, quantity, evolution, and exaltation of the impure particles it contains. But if, by our chemical



rectifications, we separate from this mixt all its impure particles, we will thereby make the pure part, it contains, a powerful medicine, and a sovereign alexipharmick; which is plainly seen in the preparations made from serpents, and other venomous creatures; and this is done in like manner, and with the like success, in the most poisonous vegetables and minerals, as milk-thistle, ellebore, antimony, mercury, and arsenick, &c. from which the spagirick art draws surprizing medicines.

Medicines then hold a place between aliment and poison, and differ from them both; 1. From poison in this, that, far from injuring nature, it relieves and assists her when she is attacked. 2. From aliment, in this, that in relieving and assisting nature, it does not pass into its substance, as aliment does. Yet there are certain kinds of medicines which likewise partake of the quality of aliment; such are those which, being extremely mild and light, cannot exert all their virtue against the distemper which is to be extirpated, but which, by joining with nature, and assimilating therewith, assume its substance, and so augment its forces, in order to attack jointly, and get the better of the disorder. This relief, this addition of force which nature receives from the specifick properties of the particles which have been an aliment to it, makes her become her own remedy.

As has been said in the beginning of this essay, that one of the principal cares of a physi-



cian should extend to all that may concern the choice of the *materia medica*, it may be proposed as a question, namely, Whether it be necessary, or at least useful, to have any regard to the time and season for making choice of these medical substances, either for gathering or working them? A great many people will look upon this question as needless, but they deceive themselves; for the observing the weather, and season, is a very essential point.

All the world agrees, that it is necessary to chuse the proper season for gathering the vegetables which one intends to use, in order to extract their juice, and preserve it; and that it is the best season when these mixts have most juice and virtue; but people do not observe, with that accuracy which is necessary, the time for preparing them. The season, the proper time for minerals and for animals, though of as much importance as that for vegetables, is nevertheless almost entirely neglected. This observation is even treated as a mere chimera by our modern physicians, who, setting it down to themselves as a law to reject all that does not fall under the cognizance of their senses, glorify themselves upon doubting of every thing, if their weak imagination does not represent them under forms proper to admit of geometrical rules, and algebraical calculations; and thus continue ignorant of the greatest wonders, the most general, and most necessary operations of nature.

But



But such as will abandon their prejudices will easily find, how necessary it is to observe the weather, and the season, not only for the choice of vegetables, but likewise for that of animals, and minerals.

In fact, who can doubt but that things above act upon things below? For a person cannot deny what he perceives with his eyes; We see, every year, when the sun returns to us, that the withered plants which seem'd dead, and the trees which were stript of their leaves, and drooping and languishing, do revive and grow young again, so to speak, get a green coat, are loaded with leaves, in a word, shoot forth and multiply; because at that time they receive abundantly the alimentary sap, which is necessary for their preservation, growth, and encrease. From whence then does this proceed? if not from this, namely, that in that season, the sun shedding forth more copiously, and more directly, his rays upon our hemisphere, sets open the pores of the earth which the cold had shut up; whence the alimentary sap of plants and trees, which rises vigorously and plentifully from the roots into the whole texture of the tree and plant, is united with the particles of the sun and stars, which have animated it, and which, by their union, have rendered it capable of producing again, and preserving the life of the vegetable, and communicating to it a generative virtue,



The same effect, and that through the same cause, is produced in animals, and in a manner almost as sensible, not only by the more succulent aliments with which they are nourished at that time, but likewise by that vital spirit diffused through the air which they breathe, that penetrates their bodies, either by respiration, or by the pores of the skin, and unites with the pure part of their nature, by augmenting their force and activity.

Why should it not be allowed, that at the the same time minerals are susceptible of the same impressions, consequently of the same encrease of force and virtue? since minerals are, without dispute, produced in the bowels of the earth by the same principles, by the same influence and action that penetrates the earth, namely, that of the particles of the sun, moon, and the other stars, proper and adapted to the different mixtures of every species and every kind which the earth produces, either within its bowels, or upon its surface. This action of the sun and stars in spring, when the earth sets open its pores to receive it, appears sensibly even in minerals; for at that time they flourish, so to speak, more plentifully, and mines send forth vapours a great deal more strong and copious, than at any other time of the year; there is then no doubt, but the choice of the season is necessary to gather the medicinal matters, not only of the mineral and animal, but likewise of the vegetable kingdom.

This



This season should also be observed for preparing medicines; since reason and experience teach us, that this preparation becomes more easy and perfect at one time than another; for, 1. The pure part of nature, from which our medicine is made up, is more abundant in that season than in any other. 2. The volatile spirits, which descend from above upon the earth, for the preservation of mixts, are then more plentiful; whence it happens, that not only the earth and the water are replenished therewith, but likewise the air through the whole concave of the celestial globe. Now in the preparation which is at that time made of chemical medicines, the volatile spirits of the mixt, which are separated from it, meet together and unite with those of the like nature which are in the air; and by this union and accretion, they acquire greater force and virtue for producing the rectification of the pure part of this mixt.

What has been said relates in general to the choice of medicinal matters, and their preparation; but should it be added, that there are still particular observations to be made as to the proper time for particular mixts, and as to the different preparations requisite for each of them, it might not be greatly amiss. These particular differences arise from the difference in the internal form of mixts, as to their radical moisture, which distinguishes their quality, and subjects them to the influences



ences of different celestial signs, thro' the connexion, relation, or sympathy, which this particular sign has with that particular radical moisture; and this is what makes it grow, and encrease in force, whenever the sign that rules over it happens to be above the horizon, and is well and properly exposed to the sun. Hence it is, that, in order to a more exact chemical preparation, we must chuse not only the spring to gather physical substances in; but farther, have a regard, in preparing them, to the rising, setting, and aspects of the signs and planets that have a natural relation to the mixt we intend to prepare.

Though I do not advance any thing extravagant, I may yet revolt several whose minds are prepossessed with new systems, and perhaps not so rational as those which have preceded them; for which some are indifferent, as they do not understand them, and as the system, in favour of which they are prejudiced, has no other advantage than that of its novelty, and its being the mode. If Montagne has in some sort foretold, in his essays, the overthrowing and discarding of Aristotle's philosophy; if Descartes has accomplished the prediction; if Newton has aveng'd Aristotle; may it not be presumed, that one day will arise some other inventive genius, who, regarding as servile the shrewd moderation of M. Privat des Molières, who has endeavoured to reconcile the opinions of both these philosophers, will invent some  
new



new system to overturn entirely those of the Cartesians and Newtonians, for which people are, at this day, so passionately fond.

The greatest part of mankind are so singular, that they place their glory in inventing strange things, and in being at the head of new opinions, no matter whether against truth, reason, or even their own repose: nay, I go farther, it would be a kind of shame and disgrace for them, if they did not get followers. But to take the thing right, there is nothing more humbling to man's pride, than this variety of opinion and sentiment which is to be seen among philosophers in different ages.

However, notwithstanding his deviations, the mind of man seems to run a circle, and in the end to come back to the very principle which he had before abandoned; so difficult a matter is it in natural things to discover the truth, and so easy to imagine that one has found it. Of this the opinion in debate is an instance; it is the most reasonable and most probable, has been taught by the greatest philosophers of antiquity, inso-much that it became a proverb among the followers of Plato. It is even at this day the opinion of modern philosophers. 'Tis true, that, taking it for a fine thing to be in the fashion, they make use of different terms; yet notwithstanding this pompous precaution, the mask falls off, the illusion vanishes, and one plainly sees, that if the terms be different,

ferent, the thoughts, notwithstanding, and the things, are still the same.

'Tis therefore vain for them to be ambitious to give the appearance of novelty and invention to their new systems, which they pretend to impose upon the world, and make people believe that they change the ideas received by other men.

Such was the manner of the great Newton, tho' pressed by the force of truth, which is eternal, he, in some measure, shut his eyes against her; but truth, which is ever vigorous and sparkling, has pierced through his eyelids, and forced him to do homage to her; he was incapable of saying any thing to the purpose, when he would lay open what that great, that surprising spring was, that sets all nature a-going, but by admitting the existence of these principles, disguised under the term *attraction*.

Newton goes farther, fearing the being deprived of the glory he imagined he acquired, in passing for the first inventor of his system, he puts his reader on his guard against the name *attraction*, not to confound it with the occult qualities of the ancients; and to rest satisfied with knowing, that there is in all bodies a central force, which, from one end of the universe to the other, acts upon bodies, both the most near, and the most distant, according to the immutable laws of mechanics.

But all these protestations, the vanity of which has been seen thro', have not prevented



vented M. Saurin and M. Fontenelle, to charge him with giving in to the chimera's of Peripateticism<sup>a</sup>. Chimera's, by no means arising from the grounds and essence of the doctrine of Aristotle, no longer understood, or but ill understood; but from the clouds, the darkness, and illusions spread over it by interpreters, commentators, and translators, who have corrupted and debased the sense. 'Tis thus men confound the good with the bad.

However, I declare that I do not mean to impose, by these observations, the necessity of paying a scrupulous regard to them, as if the success of an operation depended absolutely on the day, the hour, and moment in which it is begun; this would be to fall into a very blameable excess; we only say, that it would be better to observe, if possible, the circumstances which we have mentioned.

#### A RECAPITULATION.

When I submitted to an examination the posthumous works of the late M. Grimaldi, first physician to the king of Sardinia, before the board<sup>b</sup> of commission, there was only one of them who disapproved of chemical remedies, and who made the objections which

<sup>a</sup> See Saurin, *Mem. de l'Acad. An.* 1709; M. de Fontenelle, in *Eloge de Newton*.

<sup>b</sup> This board has been established by an arret of the council of state, dated March 17, 1731, for the better order and regulation of the three bodies of physick, consisting of physicians, surgeons, and apothecaries; in which presides the king's first

which we have been just answering: but at the very time that these objections were started before the board, M. Malouin, a celebrated physician, consequently as good a naturalist as chemist, answered them by very solid reasons, and entirely confuted them.

It is therefore only from prejudice, not from a learned canvassing, that people could have conceived a blind antipathy against sound chemistry; being prepossessed with childish and erroneous principles, by means of the different systems, which have no other foundation than the imagination of the system-makers who first invented them, and which a touch of giddiness and novelty has brought into credit: whence it has happened, that these systems have been overturned successively the one by the other; whereas the hermetick art, which is the flambeau that enlightens every philosophick truth, by the clearness whereof, one composes true chemical remedies, which are the only ones should be made use of, as the only ones good and efficacious: this art, I say, is not subjected to the inconstancy of mankind, 'tis fixt, invulnerable, inalterable, and everlasting; and the light which derives from it, is both piercing and inextinguishable; pure nature is both  
its

first physician. Before this board are examined the remedies which are intended to be made publick; and they determine, whether they be proper and useful for the cure of distempers. When they are found to be so, there is granted a brief, containing a power and permission to make up, sell, and distribute them.



its object and depositary ; and without this divine art, physicians could never raise themselves to the height of their true grandeur, whilst still ignorant of the essence of the three kingdoms, and of the true properties wrap'd up in the inmost recesses of matter.

Pharmacy can serve but like an *ignis fatuus*, to conduct into the dark knowledge of mixts ; this sort of fire has but a faint or barren light, which does not reach beyond the surface ; and geometry, with which these airy and fashionable doctors make a parade, has no direct application to the therapeutick art.

The medicinal theory comprizes among the theoretick knowledge necessary for surgeons, the doctrine of internal disorders, both simple and complex ; the knowledge of the nature of mixts, their essence and properties ; but this knowledge does not confine itself to the simple theory, and only to the speculation of mixts, it requires a chemical analysis, which points out the principles contained in the mixts, in what manner they are mixt, and their weight of nature, in order to apply properly these principles, rectified from all heterogeneous matter. For this end, one must study nature, and examine into her bowels : it is by this means we arrive at the knowledge of the art of healing and curing.

Let us examine very briefly, and as much as may be useful to the subject in hand, what knowledge is proper and necessary for a physician,

fician, in all the theoretick branches of physick, properly so called.

This knowledge consists in finding out the causes of diseases, and the quality of the medicines that must be applied to purify the blood, in which reside those heterogeneous particles, and that morbidick ferment, which disturb the animal œconomy. Now, in order to cure the diseases which proceed from this disorder, we must have recourse to good remedies which re-establish the harmony.

The theory of some physicians, and the practice of some apothecaries, are grounded upon Dioscorides and Mathiolus: these authors have been compiled, augmented, and commented upon, by very able physicians and naturalists, as Tournefort, Nissole, Lemery, Chomel, Jussieux, and a great many others; but these authors, and their commentators, have confined themselves to a description of the form, the figure, and quality of mixts, a thing more curious and historical than philosophical, as all beings whatever derive from the same original, and exist uniformly, only by virtue of a threefold principle, namely, mercury, sulphur, and the philosophick salt; from which they receive the sharpness, the integrity of the principles, and their weight of nature, divested by means of a chemical exaltation of all earthy and aqueous particles, wherein resides the true medicine, which ought to be the sole object of a physician's enquiry; so much the rather, as the great variety of drugs,  
badly



badly analys'd, is not only useless, but often pernicious in the cure of diseases, for the following reasons; 1. That any mixt whatever differs not from any other mixt, but relatively as to its figure, the proportion of the salts, and gross sulphurs, of earth and water, which are differently diffused in it, according to their different matrices. 2. That by managing and handling these different mixts, according to a chemical operation, they are purged of all heterogeneous particles, and their pure principles are thereby unfolded, which alone act without any obstacle, when superadded to the weight of nature. 3. Whereas the mixture is made at a venture with several ingredients; I say, at a venture; because without any knowledge of this weight of nature, which the blind admixture, seldom homogeneous, and very often contrary, does only render the potion gross and unpleasant, hard of digestion, and unsuccessful. However, these doctors, very confident in the beaten track of pharmacy, deceived by prejudices against chemistry, of which they only know the name, detach each party of their potions, one to the brain, another to the liver; that to the stomach, and this to the spleen; without considering that distempers do only arise from a vicious quality, introduced into the blood by means of heterogeneous particles, which envelope and absorb the heat of nature; and that in restoring this heat, it naturally purifies itself by the secretory passages,

by insensible perspiration, urine, crises, &c. from whence follows the re-establishment of the *equilibrium*, without any necessity of excessive bleeding, extreme coolers, or a low diet; which only weaken the body, and hinder the play of the natural mechanism.

The views of the greatest part of physicians are confined to denying, 1. That the substance of gold can be divided. 2. That its mercury, sulphur, and salt, can be separated each apart, and retain their respective properties. 3. Consequently, that it is possible to render this precious metal potable. In fine, there is no knowledge, no notion of this universal matter, which is the soul and basis of all beings, though it be very common, be found every where, be no expence to come at, and be really an universal medicine, prepared by a good artist, as my solar balsam plainly shows from a happy experience.



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A  
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V E N E R E A L M A L A D I E S.  

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B O O K I.  

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C H A P. I.

*Containing the design and division of this  
Work.*

**T**HE motive which, in appearance, should have hinder'd me from writing on the venereal maladies which I am going to treat of, is nevertheless the only one which has determin'd me to do it; there are few subjects on which so much has been said already.

In fact we find able physicians who have canvass'd it thoroughly, and enter'd into a circumstantial detail, not only as to the cause of the venereal malady, but likewise its symptoms, and in general whatever else may have any relation to it; so that it would seem every thing had been exhausted in such

a manner, that nothing farther needed to be desir'd.

The greatest part of authors have exerted their utmost efforts in order to make history, poesy, diction, rhetorick and invention, subservient to this purpose. In a word, all that may contribute to render themselves famous and commendable

These very authors cry up, each in particular, his own method of curing these maladies, which they maintain to be the best, most perfect, and most infallible; but they contradict one another in such a manner, that it is hard to know which party is in the right; so that these different opinions have oblig'd me to go to the bottom of this matter, and pass from meditation and canvassing, to experience and matter of fact.

Such as hold for mercurial frictions, which is the method most generally us'd for curing the pox, are divided among themselves; the one would have plentiful salivations excited, without which, according to them, there can be no perfect cure; the others would have no salivation at all, and maintain, that the method of extinction is the best, that it cures radically without any troublesome symptom, and that this is the only method which ought to be practis'd.

Both these parties unite together to combat empiricks; that is to say, such as they call so, who give ptisans, pills, or other mercurial preparations, to be taken inwardly.



It is therefore owing to this great number of authors, this diversity of opinions, the importance of the subject, and the little knowledge that persons have of the remedy they administer, that I have been induc'd to put pen to paper, not to censure those people, but to give an account of their method, and to show my own, and leave the judicious world to determine and use that which they shall find best, having no other view, and desiring nothing more, than to be useful.

1. I will give some idea of venereal maladies, their causes and effects, to the end that, when we know them, we may be able to apply the proper remedies, and examine whether those I offer be of that sort.

2. As it is a point determin'd, that mercury or quicksilver is the best specifick we know for the cure of these maladies, I will likewise give some idea of this mixt, its nature, virtues, qualities and properties.

3. And lastly, I will show the method of working and preparing it, in order to make it fit to be administer'd; either by way of friction, or in spirit and pure quintessence, without any admixture, in order to render it proper and homogeneous to our natures, divested of all its heterogeneous, earthy, arsenical, and flegmatick particles, which occasion the fatal effects and the devastation it commonly causes in the human body.

I shall let those who have given us the history of this disorder, quietly enjoy the

glory they have acquir'd. In fact, how many curious and far-fetch'd notions, and how many agreeable anecdotes have they not given us! It is true, one might and ought to have forbore exposing to the world, without any manner of distinction, in such an history as this, princes, kings, and emperors, particularly a great king, whose memory, on account of his eminent virtues and noble actions, will always be dear and precious to every Frenchman, and who always will be the object of their love, respect, and veneration. Besides, diseased persons have more need of remedies to cure them, than histories to amuse them; we will therefore only propose whatever is necessary for the cure of this malady.

## C H A P. II.

### *Of the venereal malady in general.*

**T**HE pox is a contagious malady, that arises from a pungent, virulent, and corrupting taint, which alters the alimentary juices, and infects all the principal parts, and whose corruption passes into the animal spirits, which are, as it were, the œconomists of life and health; whence proceed all the different symptoms of this cruel malady, the smart pains it causes, the tumours, ulcers, and other symptoms to which all the parts of the human body are subjected, and which



even the mind itself feels; and all this according to the parts of the body affected by that taint. But it is necessary, for a more perfect understanding of it, to know wherein this venom consists, and what it is that occasions and produces it.

This venom is a perfect and total corruption of the principles that compose the balm of nature, or the radical moisture which preserves the animal, and maintains it sound in all its parts.

We will call these principles salt, sulphur, and mercury, or the dry, hot, and moist of nature, whose union, in the several proportions of nature, constitutes this vital balm, and whose alteration is the cause of all maladies, and the principle of death.

This alteration of principles happens when the proportions of nature are wanting, whence follows a disunion.

As this defect in the proportion is greater or less, the disunion is more or less entire, and the corruption more or less complete, and more or less dangerous, and more or less difficult to cure.

All our maladies, their differences and dangers, arise from no other quarter; consequently it is from the knowledge and examination of these defects, that we can tell the remedies proper to cure different maladies.

The venereal disease is the most extensive, the most diversified, and one may call it the most considerable of all those disorders that attack the human body, as the source of its  
fire

fire lies in the parts of generation, and as its venom infects at first the very semen, which is the purest part of man, and his vital principle; and as by that means it spreads throughout the most delicate parts of the body, and those the most essential and most necessary to life.

The principal cause of this compleat and total corruption, which forms the venereal venom, is the intemperance of our passions that carry us to use, without measure and rule, the act established by nature for the propagation of the species. This incontestable truth has been acknowledged at all times, and the most voluptuous have not dar'd to dispute it.

*✓* Epicurus, that master of pleasure, could not bring himself to caress a woman, or approve the excessive delights of love; he maintain'd that their embraces were the capital enemies of our health; that in unbounded rencounters, all our principal parts suffer'd, and that even our souls were in some measure affected.

In fact, the semen is, so to speak, all spirit, and form'd of the purest and finest particles of sulphur, mercury, and especially salt, as is plain from that lively sensation of pleasure which is perceiv'd even in the parts the most remote from the centre.

Now in rencounters, not so much for the sake of natural generation and the production of its like, but rather for the sake of pleasure,

to



to which we give ourselves up without moderation or measure, intoxicated with these murderous delights, we repeat them to excess; at which time the unctuous fluid is separated and dissipated, leaving behind only a flegmatick humour, which, joined to a fire burning contrary to nature, excited by the reiterated motions and violent efforts made in the vagina, causes a fermentation, and the corruption of the semen in its proper substance; the infected spirits flow back in the body towards their source in the blood, and by their encounter and mixture, infect the other pure spirits dispersed over the whole body, and each particular part thereof, in order to perform there all the functions proper for the preservation of life, and the maintainance of health.

However the natural heat being excited beyond measure, or even by means of its faculty proper for separating and expelling the corruption which attacks the sound parts, dries up and calcines the salt of the balm of nature. This calcin'd salt becomes burning and caustick, it corrodes the flesh, and forms ulcers therein; the more volatile part of this salt is carried towards the skin; that which goes to the surface forms pimples and little ulcers there, which cause shedding of the hair; the grosser part of the salt stays behind in the middle of the flesh, or attacks the nerves and muscles, or penetrates into the bones. Hence arise smart and intolerable pains and other symptoms.

That

That gross portion of the salt which could not be rais'd towards the surface, and which remains in the centre of the parts, becomes, by a continu'd calcination, more fixt, more acrid and pungent; it turns to a tartarous matter, from which proceed <sup>a</sup> tophus's and <sup>b</sup> nodus's, so difficult to be cur'd, not to say incurable, by means of common remedies.

Hence we say, that if a woman have to do with several men successively, though very sound, the mixture of those different sperms and semen, whose composition and constitution is almost always different, will more readily occasion a fermentation and disunion of the principles in the genital parts of a woman, which will form there the pocky venom with which she will be soon infected, and which she will communicate to those who shall have to do with her; so that a woman and man once infected, will infect all those who shall have commerce with them; and thus that shameful and cruel malady spreads universally.

The virulent matter may even be exalted in some persons to such a degree, that their very touch, their breath, their spittle, their garments,

<sup>a</sup> Tophus's are hard concreted tumours, which are formed in the joints of old gouty and pox'd persons.

<sup>b</sup> Nodus's are almost the same thing as tophus's; that is to say, hard, indolent tumours, which rise upon the joints, ligaments, and tendons, and which almost always are a symptom of the pox or gout. We more commonly take for nodus's little pustules or tumours, in form of small knots, which rise upon the surface of the bones, and render it uneven; tumours very frequent with pox'd and gouty persons.



garments, the cloaths in which they have lain and sweated, the glaffes, or other things, out of which they have drank, and which have not been wash'd, may communicate their taint, at least in a certain inferior degree, but which, if neglected, may, according to its nature, without any thing farther, become considerable.

There are even learned physicians, who have thought that the pox might be look'd upon as an epidemical malady, which is often produced by external causes, as the influence of the stars, and a malignancy diffused in the air; an opinion which they ground upon the example of the Indians.

I leave the discussion of this point to the genuine and adept astrologers, who alone can find out the remedies proper against the influence of malignant stars.

I will only say, that this malign influence can only be regarded as a partial and occasional cause, in so far as it facilitates and augments the fermentation.

But there is a more important point to be decided, which authors have not sufficiently attended to; to wit, whether the pocky taint, even the most malignant and most dangerous, can be form'd solely by the intemperance and excess of two sound persons, who, in their commerce with each other, observe no measure in their sensual gratifications, and exceed the bounds of nature. Nothing hinders me to believe the thing possible, since I  
look

look on this malady as a just punishment of their burning and unbridled lust; as we shall endeavour to show plainly in the following chapter.

## C H A P. III.

*In which we will show the antiquity of the pox; and that it is possible to get this malady by an excess and intemperance, which strains and injures nature.*

**I**N order to establish our opinion, we need only make some observations upon the nature of this malady, and take notice of the embarrassment and uncertainty in which those are involved, who have undertaken to establish the contrary, and fix the epocha when it began, and how it was introduced into Europe, and by whom; a chaos which they have not been able to clear up.

I am not ignorant of the learned dissertations which have been written upon the subject by several historians, and several able physicians; yet, nevertheless, all the nations in Europe, nay, in the world, whether French, Spaniards, Neapolitans, or others, will not forbear reclaiming, whilst they obstinately persist in assigning a new epocha, namely, about the end of the fourteenth century, and laying the blame and reproach of this shameful malady, upon this or that nation.

Upon



## VENEREAL MALADIES. 63

Upon this subject there are very singular opinions, which plainly show, that the greatest geniuses, when they wander from the truth, are capable of the greatest absurdities and deviations.

Jerom Fracastorius, in a very elegant poem, has imagined, that the first who was infected with this malady, was a shepherd call'd Syphilus.

The same Fracastorius, and Massa, have look'd upon this malady as <sup>a</sup> epidemical, and ascrib'd the original cause of it, to the influence of the stars; and others, that it is <sup>b</sup> endemical.

Cisalpin and Leonard Fioraventi, pretend, that the pox is owing, the one, to the mixing of human blood with wine, the other, to the eating of human flesh; and the latter gives an account of several experiments which he pretends to have made on this subject.

Van Helmont, an author otherwise so valuable, gives a story of the origin of the pox, that favours much of enthusiasm. “ A devout layman, says he, endeavouring to conjecture the reason why the pox had appeared in the past age, and not before, fell into a trance, and had a vision of a mare  
“ very

<sup>a</sup> Epidemical diseases are such as indifferently attack all sorts of persons during a certain time, and depend upon some common and general cause, but withal accidental; wherefore these maladies are contagious, but they are not all malignant.

<sup>b</sup> The diseases common to certain countries are called endemical; they differ from epidemical in this, that epidemical diseases rage only at a certain time, arising from some vicious quality in the air, whereas endemical ones are common at all times among a certain people.

“ very much troubled with the farcy.” From whence he suspected, that at the siege of Naples, where this malady made its first appearance, some man had had abominable commerce with a beast of the same kind, affected with the same disorder; and that afterwards, by an effect of the divine justice, it had unhappily infected all mankind.

Linder, a doctor of physick, refines farther upon Van Helmont: he confidently affirms, in a dissertation which he has given upon poisons, that the pox derived, among the people of America, its original from sodomy, formerly practised between men and large apes; which are the satyrs of the ancients.

We should never have done, were we to give an account of all the vague, chimerical, and extravagant notions which have been formed and published upon this subject.

Historians are no better agreed among themselves. What is reported of Christopher Columbus, and his associates, in the voyage, alledging, that, at their return from the Indies, they brought with them this malady, is all nothing but a parcel of falsities and anacronisms.

Mezeray, of all the historians, is one of those who has written the most judiciously upon this subject. What he says, seems to me worthy of being related. In the expedition of Charles VIII. into Italy, he concludes in these words; “ This expedition, happily begun, ended unhappily; the French brought  
“ nothing



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“ nothing back but a filthy malady, got by  
“ venereal infection; to which has been  
“ given the name of pox, on account of its  
“ livid pustules.

“ This malady is the severe scourge of de-  
“ bauchery, the summary of all evils, the  
“ reproach of physicians; in fine, it is an  
“ unconquerable monster, which, changing  
“ into more forms than Proteus, hides itself  
“ from all remedies; since, some time after it  
“ has been laid asleep, it again throws out its  
“ venom; and, tormenting these unhappy  
“ patients by numberless sufferings, only  
“ gives them very late, and that after a thou-  
“ sand agonies, death, the only remedy which  
“ they can hope for.

“ Physicians almost all agree, at this day,  
“ that this malady is derived from the Indies,  
“ because it is common in the islands of  
“ America, as the small-pox is among us,  
“ and say, that it was brought over through  
“ the incontinence of the Castilians, who  
“ propagated it in Sicily, and the kingdom  
“ of Naples.

“ But though, in fact, it be like that of these  
“ islanders, and be cured by the same reme-  
“ dies, namely, guaijac and sarsaparilla; ne-  
“ vertheless, this reason may be false, if what  
“ the learned Fracastorius says be true, that  
“ this calamity had been foretold by astrologers,  
“ as an effect of the stars; that a great many  
“ were at first infected with it, even with-  
“ out contact; and that, in the same years,

F

“ other



“ other maladies, formerly unknown, were  
“ observed to have had their birth.”

All the conclusion that can be drawn from this piece of history of Mezeray's, setting aside the moral of it, is, that the opinion commonly received among physicians, touching the origin of the pox, is very equivocal and uncertain.

If we examine the different names which have been given to this malady, our doubts will be augmented, our uncertainties confirmed.

We see, that because this malady could be propagated among a great many persons in a very little time, it has been called by the name of the album of Avicenna, the terminthus of the Greeks, and a kind of pustulous itch, which the ancients called *sahafati*.

Others observing that the patients suffer in all their joints, have called it arthritick; and others *psora*, on account of the pustules it causes upon the skin.

It has been farther alledged, that it is the elephantiasis, that is, the leprosy, a contagion, and the assemblage of all kinds of maladies.

Some physicians, in their embarrassment, not knowing which side to take, have adopted, so to speak, a kind of pyrrhonism, and pretend, that it is a doubtful, vague, and uncertain malady, which they could not range under any determinate genus.

In fine, some have called it the itch of the stews, the shameful gout, the venereal  
caries,



caries, the immodest pustule, and the great pox, because the venereal pustules are pretty like those of the small-pox. It has had a great many other names given it, which I forbear mentioning, to avoid prolixity; but whatever be the name and epocha of it, let us now come to the malady itself.

There is no doubt, but the pox is the just punishment of sin; and, likewise, that all authors, even the most severe and reserved, unanimously agree, that this malady is a sort of Proteus; and that it assumes the form of all maladies, nay, even of all the different sorts of them. Which being supposed, it may be concluded, that it is as old as sin; for more or less incontinence causes more or less infection in the man, which discovers itself more or less. People transgress the law of God and nature; the punishment of this transgression is inflicted by the maladies, which, under different forms, are all no other than so many particular sorts of pox.

This is even the opinion of a great man, who, after deep reflexion on this malady, assures us, that he is convinced, it is by the divine providence that the venereal evil has appeared upon earth, in order to be a restraint upon the boundless lust of mankind, or to serve as a scourge.

I believe that Cicero had just reason to say, tho' upon another occasion, that it was by a decree, very advantageous for mankind,

that crimes carry along with them their own punishment.

Galen observes, that in some lascivious men the brain has been found extremely diminished. We learn from experience, that in fact it is cooled and dried thro' the loss we sustain of the animal spirits, and the humours. What likelihood is there then, that, being thus disposed, it can contribute to the health of the body, and furnish out matter to concur in performing all the noble functions of the soul?

Thro' the loss of spirits, the eyes become hollow and sad, the cheeks hanging, the nostrils dried up, the forehead parch'd and callous, the hearing impair'd, the mouth stinking: in a word, we see, but too often, the fatal effects of irregular amours.

If the head has its maladies, the breast suffers no less; men become phthifical, and dried up, by reason of their too frequent commerce with women.

As to women, they have their peculiar maladies, the cancer in the breast, the suppression or excess of the menses, the whites, hyfterick fits, inflammations, abscesses, scirrhus's, ulcers, and the cancer in the matrix; they become barren, or subject to abortions, or at least the children which they bring forth are born with an universal erysipelas, being half corrupted, and all over covered with ulcers, and scrophula's.

There



There is observed in the one and the other sex, a strange fire that consumes the unctuous moisture, so necessary for the heart; and a slow fever, that weakens and undermines them.

The stomach no longer performs its functions, its heat is dissipated, and it produces nothing but crudities, instead of good chyle.

From thence proceed so many catarrhs, de-fluxions, gouts, sciatica's, rheumatisms, drop-sies, and nocturnal pains, which those who have been too much addicted to venery feel all their life long.

It is from this poisoned fountain, proceeds that weakness of the nerves and joints of the body; and that, instead of a soft, balmy, and glutinous humour, that facilitates the motion of all the parts, we find nothing but viscidities.

The natural parts are, in some sort, those that suffer most, and the adjoining parts likewise feel the cruel usage, and are, so to speak, punished for having contributed, on their part, to the excess of immoderate pleasures.

I am far from exaggerating the matter; on the contrary, I keep within bounds: all the bowels, and generally all the parts of the body, feel this cruel malady, which multiplies and disguises itself under different forms, tho' arising from the same principle.

The reason of this is, that the loss of the pure spirits occasions a defect of tone in the bowels, or interrupts their regular functions,



a disorder is induced into the fluids; there reigns no more any harmony in the microcosm, whereby the aliment, being ill prepared, and ill digested, becomes venomous. Sound physick, which is acquired in the knowledge and practice of chemistry, teaches, that each body contains, in its proper bed, its arsenick and poison, which is nothing else but its crude, undigested part.

Once more; there is nothing strained in the picture which I have just drawn of the maladies caused by the excess of an amorous passion; they are the very same with those of the pox specified, as shall be seen in what follows.

But independently of the sufferings of the body, which cannot be expressed, there is still one of greater importance.

In fact, this unhappy passion corrupts our mind, abates our courage, and hinders the elevation of our souls; a single example is sufficient to convince us of this truth.

Solomon, whom the holy scriptures have surnamed the wise, had, by the multiplicity of women, and the immoderate commerce he had with them, corrupted his heart and mind, to such a degree, that he sacrificed to their idols, and died enervated in a kind of imbecility.

More authors than one have advanced, that there is but one temperament, and but one malady; we may with much more reason say, though in another sense, that there is



but one remedy, and but one physician; a thing that may be easily understood, and that needs no farther explanation.

I am not of the opinion with those who fix the epocha and introduction of the small-pox into Arabia, to the second century, because I take this malady to have been as old as the world, and look upon it as an emblem and figure of the great pox, and like a kind of instruction and warning to mankind, to live in a prudent continence; and for this reason, we almost always have the small-pox in our younger days.

For if we did not carry, in some measure, the seeds of this malady within us, should it be possible, that it would have made impressions sufficiently strong upon the blood of such as have been first seiz'd with it, for communicating it from the father to the children, even for perpetuating itself, in such manner, through the whole human race, that there is but a very small number of persons to be found, who have not been seized with it, at least once in their life-time.

Hippocrates was acquainted with the venereal disease, and has very accurately described it in the third section of his book of epidemics, where he speaks of a malady accompanied with a denudation of the bones, shedding of the hair, an ignis sacer, accompanied with several small ulcers, pains in different parts, abscesses about the throat, teeth and gums, and with ulcers in the privy parts. Is



not this a picture to the life of the pox? If the father of medicine have not called this malady, which he describes, by the name of the pox, the reason is, because in his time they had not agreed to call it so, yet it was nevertheless that malady.

Galen speaks of this malady in different places of his works; he describes the bubo's that break out on the groin, the gonorrhœa's, and preternatural tumours; he treats of several sorts of ulcers, which we very often find in those who have the pox.

Avicenna, and the other Arabian physicians, likewise describe a great many sorts of swellings, which are so many symptoms of the pox; wherefore several physicians have maintained, as has been already observed, that what we, at this day, call the venereal evil, was the *sahafati*, *mentagra*, or *pudendagra* of the Arabians.

In a word, whenever I shall find a person infected with a malady that attacks the whole body, corrupts the fluids in the vessels and bowels, taints not only the flesh, but the bones, cartilages, nerves, and the whole nervous system, bubo's appearing on the groin, the genitals ulcerated, the skin full of pustules, and other symptoms of that sort, people may give that malady what name they please; for my part, I cannot forbear calling it the pox.

Celsus, who has been looked upon as the Latin Hippocrates, gives such a description



tion of this very malady, that one cannot mistake it. We find, that anciently there were persons troubled with swellings like a fig, foul ulcers, pustules, and other symptoms, that are not equivocal, and which characterize the venereal disease.

To be the more convinced of this truth, we need only look at the title which William Salicet, who wrote in the year 1270, has given to the forty-eighth chapter of his surgery; “ of white pustules, breakings-out, and “ corruptions, which happen to the penis, and “ about the prepuce, from having had dealings with a common woman, whether she “ be unsound, or it proceed from some other “ cause.”

Gordon, a celebrated physician and professor at Montpellier, who wrote in the year 1305, in the title of his book, *de passionibus virgæ*, says, “ That among the external causes of the maladies that happen to this organ, we must reckon that of having had “ to do with a woman whose matrix is impure, virulent, and full of sanious matter.”

How little soever one is capable of lending an ear to the truth, it appears to me, that a person cannot refuse such testimonies, without being extremely prejudiced.

To the indefatigable, happy, and useful labours of M. Astruc, we owe an account of China, which shows us,

1. That the venereal disease is altogether as common in this empire, as in Europe.



2. That the Chinese physicians believe it has been so at all times.

3. That their books of physick which pass for the most ancient, far from making any mention of the beginning of the venereal disease, speak of it as a very ancient malady.

4. In fine, that the remedies for these maladies are particularly mercury, but not administered without a previous preparation. All that has been added to these remarks, by way of dissertation, attempting to weaken their force, is not capable of destroying their accuracy and certainty.

We may, in some measure, say of this able physician, what has been said of Origen, that never man wrote or spoke better than he did, when he spoke or wrote well; and never man spoke or wrote worse than he, when he spoke or wrote ill:

*Ubi bene nemo melius; ubi male nemo pejus.*

This requires some explanation on my part, lest any misinterpretation should be made of my meaning. I declare, that among the great number of authors which I have read, and endeavoured afterwards to reconcile by assiduous pains, continual researches, and a great number of experiments which I have made, I found nothing so compleat and finish'd, as M. Astruc's book: I should still continue to admire him, did he not seem to me a little too much prejudiced in favour of strong frictions, and plentiful salivations, in  
order



order to give a new epocha to the origin of the pox, and totally to discard the preparations of mercurial remedies from being administer'd internally to cure this malady. It is therefore, with regard to that wherein we differ as to opinion, that I mean, when I say that he has written and spoken ill, and no otherwise; for as to the rest of his treatise, which comprehends, in general, all the venereal maladies, their symptoms, circumstances, and dependencies, I admire his method, and I lay it down as a rule, with very little exception, for myself to follow and practise. I go farther; I exhort all those who would desire to perfect themselves in the cure and management of this malady, to study his works attentively, it being in some sort impossible to find a greater master.

Did it not break in upon the brevity which I have proposed to myself, I might easily adduce a great many more testimonies; among others, the opinion of Gassendi, who likewise maintains the antiquity of the pox. Let us therefore cut short, and hold to the definition which M. Col de Villars gives of this malady, in his dictionary, being persuaded that I unite all the opinions of the good authors that have gone before us, in that of this modern author; and that I oppose opinion against opinion of two celebrated modern authors, both great physicians in the same university.



In fine, I shall close this chapter with quoting what has been said by Martial, in one of his epigrams; and by Juvenal, in one of his satires; which is more than sufficient to decide the dispute in favour of those who maintain the antiquity of this malady.

“The pox, says Col de Villars, is a contagious malady, originally contracted from impure dealings with a loose woman, which shows itself by different symptoms, the principal of which are shancres in the privy parts of the one and the other sex, namely, such excrescences as warts, nodes, ficus's, thymus's, hard or ulcerous pustules, and other species of excrescences, condyloma's in the same parts, in the fundament, and in the internal and upper parts of the thigh; virulent gonorrhœa's, phymosis, and paraphymosis; bubo's in the groin, sometimes in the armpits; livid pimples on the forehead; eating tetters; leperous scabs; phagedenick ulcers in different places, particularly in the mouth, palate, and nose; wandering and nocturnal pains through all the members; obstinate headachs; and a great number of other symptoms, under which this troublesome malady conceals itself, and that without any fever. It is true, that these do not all meet in the same person, but a good many of them must concur to characterize this malady. The French soldiers having been infected with the great pox in the kingdom of Naples, under Charles VIII. gave rise to its being called  
the



the Neapolitan disease. The Italians, on the other hand, believing that the French had brought it into their country, call it the French disease; as it is common in Spain, it has also been called the Spanish disease. Before the war in Italy, under Charles VIII. this malady was so little known, that some people fix the epocha of its original to this time; but it is as old as debauchery in the world. A sound woman, prostituting herself to several men equally sound, gets it, and communicates it to others. It may then have begun as early as there have been loose women, and that has been some time.

*Ficosa est uxor, ficosus & ipse maritus;*

*Filia ficosa est, & gener atque socer:*

*Nec dispensator, nec villicus ulcere turpi,*

*Nec rigidus fossor, sed nec arator eget.*

*Cum sint ficosi pariter juvenesque senesque,*

*Res mira est, ficos non habet unus ager.*

Epigr. MART. l. 7. art. 70.

That is, the wife has got the ficus, and the husband too; the daughter has it, and the son-in-law, and the father-in-law. The overseer, and the farmer, are not without a filthy ulcer; and the sturdy ditcher, and ploughman, have their share too; since young and old alike, in this family, have the fig, it is surprizing that not one field of theirs has any.

It is to be remarked, that the point of this epigram lies in the allusion between the latin word *ficus*, which signifies a shameful malady,

dy, and a fig, which all the world knows is a fruit good to eat.

—*Quis enim non vicus abundat*

*Tristibus obscænis? castigas turpia quum sis*

*Inter socraticos notissima fossa cinædos.*

*Hispida membra quidem, & dura per brachia  
setæ*

*Promittunt atrocem animum, sed podice lævi*

*Cæduntur tumidæ, medico ridenti, mariscæ.*

Juv. Sat. 2. l. 9.

That is, What place is not full of Hypocrites, who lead an infamous life? You declaim against the vices of others, whilst you yourself are the common pathick to abandoned debauchees, who pretend to be followers of Socrates. To see the roughness which is over all your body, one would take you for no such infamous person, but rather for a grave philosopher; but, however, you are cut for large excrescences in your fundament, whilst the surgeon cannot forbear laughing at you.

Let us conclude this chapter, with saying, that there are a great many causes of this cruel malady, some internal, and others external; some antecedent, and others consequent; some proper, general, and efficient, and others common, partial, and occasional.

Upon once knowing the nature, causes, and effects of the venereal venom, it is no difficult matter to know the qualities of the remedy one should use in the cure thereof;

con-



consequently, one may easily judge, if what is proposed for this end is proper to answer it truly; or whether it be but indifferent and useless, or whether it be not even contrary to it, and dangerous.

I shall say nothing of my own experience, as to the cures I have performed; I submit myself to the examination and judgment of learned physicians, and to the decision of skilful persons, well disposed towards the publick.

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A  
TREATISE  
ON  
VENEREAL MALADIES.

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BOOK II.

*Containing, 1. An account of common mercury, or quicksilver. 2. The purifications and preparations of this mixt. 3. A treatise on the viper, its preparation and quintessence.*

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CHAP. I.

*What common mercury, or quicksilver, is.*

**I**N order to work any mixt well, a person must first know it well; wherefore we will enter upon a circumstantial detail, in order to explain what mercury is.

It is a very common, but one of the grossest errors, to imagine that the common mercury, or quicksilver, either is, or contains in itself, the general seed of metals; and that all metals,

tals,



als, before they become specified, have begun by being that mercury, which afterwards comes to be such or such a metal, either perfect or imperfect, according to the quality of the place where nature has lodged it, in order to work it, and make it either gold or silver, copper, iron, tin, or lead. Certainly common mercury is not the seed of metals. Metals have not been the same with common mercury, before they have arrived at what they are; and this mercury, or quicksilver, is itself a genuine metal, imperfect, it is true, tho' less so than any of the other metals.

Without giving a detail of the physical reasons that may destroy this error, I will content myself with giving only one reason which discovers its absurdity. Common mercury is much purer than lead, and all the other imperfect metals: Now if nature should begin the composition of metals with quicksilver, it would by its coction render this seed worse, instead of perfecting it. It is like all the other metals produced from a metallick seed, formed by another sort of mercury, and specified by the quality and proportions of its principles.

This metal is composed of an equal part of the metallick moisture, which is the true mercury, and of the dry hot part, which is the sulphur; both the one and the other almost entirely divested of all elementary impurities, and joined together with a very little salt.

It is this equality of sulphur and mercury, or of dry and moist, which makes them unite together, so that neither of the two is predominant, but equally tempered together; which is likewise the reason that this metal moves and rolls continually about, without being able to stop, on account of the fluidity of the mercurial part, which is a humid of a spherical form; but yet, without this humidity ever wetting any thing it touches, on account of the dryness of the equal part of sulphur, and the want of salt, which hinders the adhesion.

Though this point be sufficiently clear, and it give us a just idea of mercury, however that does not serve to complete our design, which is to leave no doubt as to the knowledge of this mixt, at least as much as is possible; let us therefore endeavour to come nigher to the subject, in order to arrive at a more perfect insight into it.

## A R T.    II.

Few persons are ignorant that quicksilver, or common mercury; grows, and that it is found in mines as other metals are. It is called hydrargyrum, quicksilver, silver-water, as it were; for mercury is fluid, like water, and of the colour of silver; it is called for the same reason quicksilver; besides, it is called mercury, because it is volatile, and always in motion; as formerly they painted Mercury the messenger of the gods, son of Jupiter



Jupiter and Maia, the daughter of Atlas, and because the astrologers, and true chemists, pretend that it receives influences from the planet Mercury.

Mercury therefore is a fluid and moving metal, of the colour of silver, very heavy, yet nevertheless volatile, penetrating, and easily amalgamating with gold and silver. There are three sorts of it.

The first sort, which is found quite fluid, and almost pure in the mines, is very rare, and the best sort, and is called virgin-mercury. They have a proof of its goodness by this, namely, when they have amalgamated some gold with this virgin-mercury, the amalgama being put into the fire, the mercury entirely carries off the gold, which the other mercury does not.

The second sort is got by frequent washing from it the earth with which it is impregnated; and when they can separate no more of this earth from the mercury by means of water, they put the earth into iron retorts, and distil it, whereby is got a common mercury, very much inferior to the virgin sort.

The third sort of mercury is that which unites and incorporates in the mine with sulphur; when some subterraneous heat promotes the mixture, it is sublimed, and becomes what they call natural or mineral cinnabar, in the same manner as the artificial cinnabar is made. That which comes from Carinthia, is the most esteemed, and holds the middle place,

as to goodness, between the virgin and the common mercury.

One cannot be too exact in the choice of mercury, which may be impure, either because it commonly retains some impurity from its matrix, which is the place of its origin; or on account of some foul earthy particles, and some other impurities, that spoil it; or on account of some impure mixture, amalgamation, and adulteration of the merchants who sell it.

With regard to the choice which ought to be made as to its origin, we must always take that which is near the mines of the purest and noblest metals, consequently those of gold; wherefore the mercury from Spain and Hungary has very justly the preference.

The matters which naturally spoil mercury are arsenick, antimony, lead, and cadmia; but there is another artificial adulteration, which is very difficult to be discovered, either by the eye, or by the weight, for it is mixt with some portion of lead or bismuth, in such a manner, that the whole passes through shamois leather, without leaving any thing behind.

There is sold at Paris a great deal of adulterated mercury, particularly that which is taken from the back of broken looking-glasses; which is no other than mercury amalgamated with tin; and this is what they call quicksilvering.

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There are two ways to discover partly these frauds, as has been shewn by Le Fevre and Lemery; the first is to distil mercury in a retort; for if no impurity remain at the bottom, it is a sign that the quicksilver is pure. The second way is, to make it evaporate in a silver spoon laid upon lighted coals; for if the mercury leave behind only a yellow or white stain, it is a sign of its purity; but if it leave a brown, black, or dark stain, it is a plain sign of its impurity and adulteration.

The matter in hand is too serious and important, not to agree, that all these trials and purifications are but superficial, weak, and insufficient, to flatter ourselves with having got a pure mercury, such, in a word, as it ought to be, in order to be able to administer it with success; wherefore we will accurately show, not only the method of rectifying its abuses, but likewise that of purifying it thoroughly, in treating of its preparation.

Before we enter into this detail, let us see what that able physician and chemist Boerhaave says of it, after the experiments of Sir Isaac Newton.

*The opinion of BOERHAAVE.*

Mercury is the heaviest of all liquids, and though you have divided it as much as possible, yet it may be divided still farther, as may be conceived from its penetration, whereby it runs through all bodies, except glass: it shows, that its least particles have their

specifick gravity greater, in proportion, than that of other bodies, and proportioned to the weight of the whole mass.

Hence it comes to pass, that if mercury be mixed with any other fluid, and this mixture be put in motion by the same agent, the mercury moves swifter than the other fluid, and keeps in motion much longer, because its particles impel those of the other fluid which have less motion: it penetrates into them, by dividing and breaking them asunder by its extreme velocity, and by communicating to them a greater motion.

Tho' this action of mercury upon other fluids depends solely upon its solidity, yet it may be encreased by reducing it into parts still smaller, because then each of its particles receives an additional power of acting, in proportion to the encrease of its surface.

The mercury which we receive into our body, at least as it is commonly given, does not act upon our fluids, but in proportion to their contents in the smallest vessels, for in the large vessels it gathers into drops, and does not mix intimately with our fluids; but when it has passed into the smallest vessels, the straitness of the passages obliges it to divide itself into very minute particles, and then it mixes intimately with our fluids: whence we have reason to believe, that it does not act immediately upon the blood, but upon the lymph contained in the smallest vessels.

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We may likewise deduce, from this supposition, the reason why these remedies operate more effectually in bodies that are troubled with obstructions, as for instance in those attacked with the pox, the dropfy, or scurvy, than in such bodies where all the vessels are pretty clear and open.

From these observations we may conclude, that when once the mercury enters into our bodies, it divides and breaks the molecules of our fluids, which were too closely united together, and consequently that our fluids, by what mechanical reason soever it be, are comminuted and broken asunder, in such a manner, that they are reduced into parts as small as can be imagined, and which, for that reason, are capable of gliding easily through the lateral lymphatick ducts.

Now that mercury has all the efficacy which we pretend, we have an incontestable proof of it by the following example; if the saliva, or urine, be reduced into very minute particles, either by its own attrition, or by the heat of the sun or fire, it yields as fetid a smell as that of the saliva which has been put into motion and evacuated by mercury.

Upon these reasonings and observations, both of Newton and Boerhaave, which we have just related, there will arise a great many things to be said. Though they be authors of high reputation, yet they cannot impose upon the truth. Had Boerhaave, as good a naturalist as an able physician and chemist,

searched more into the nature of mercury to the bottom, he would not have confined himself to the virtues which he ascribes to it, that may be called its external virtues, namely, its spherical figure, its weight, penetration, volatility, and the like; he would have passed on to its virtues, which I will call internal, which it contains in its very centre, and would have agreed, that this mixt requires, before it be taken inwardly, to be purified, worked, and prepared; because, otherwise, its admirable virtues are stifled, as it were, under the pressure of its earthy impurities, and the corruption of its original; that, in short, it is necessary and indispensable to separate from this mixt, as in general from all the other mixt bodies of nature, the pure from the impure: but let us supply what he has been deficient in, and in fact give an account of the internal and substantial virtues which mercury, when well prepared, contains; a thing which will be very much to our purpose, that is, make it better known; and consequently we shall be better enabled to work and administer it.

### A R T. III.

Though in general mercury has not been perfectly known, and still less well prepared, however it is a point decided, that it is the most powerful, and the best specifick, of all the remedies we have for the cure of venereal maladies; but this mixt should be extremely  
pure,



pure, and disengaged from all its gross and earthy parts, since it contains an alkaline mild salt, which acts upon an acrid and pungent one, and divests it of its caustick quality; that it has a great deal of natural fire, which is not a burning and destructive sort, but an inflaming, fomenting, and digesting one; that it destroys the acidity or crudity which might be predominant and noxious; that it is replenished with that unctuous and radical moisture which constitutes the balm of life; that it is very penetrating and active, and altogether spirit; that it repairs those which are dissipated or corrupted; that, in fine, it carries life and health through all the parts of the body, and those the most remote from the centre. But this mixt must be prepared in such a manner, as that it may contain nothing that may obstruct the effects which we require to be performed by it upon nature.

Can it be said, that crude, corporeal, earthy, and gross mercury, such as it is administered in frictions, bolus's, or panacæa's, grossly work'd, without art, skill, principles, or discernment, and in some sort at a venture, should have the necessary qualities which we have just assigned it? Should not we, on the contrary, agree, that it is dangerous, often useless for a true and radical cure; that it operates only by its weight and volatility; by which means breaking and attenuating the fluids often beyond measure, carrying along with it, at random, the gross and vitiated parts,

parts, changes the very form of the malady, moves it into some other place, varies the symptoms, and so deceives the credulous patient, and the best meaning physician?

By its earthy quality it gives hold to acids, which stop and coagulate it in the small interstices of the nerves and joints, into which it had introduced itself; we are obliged to acknowledge these troublesome and too frequent inconveniencies, which prolong and augment smart, cruel, and insupportable pains, and which heighten the malady, very far from curing it.

But as mercury contains in itself, substantially, all the requisite, useful, and necessary qualities for curing venereal maladies in general; and that there is no farther need in order to cure these maladies, but to prepare it well, and work it philosophically, to subtilize and render it pure and perfect in quintessence; one may justly give this mixt all manner of encomiums, and ascribe to it all the requisite virtues and qualities, especially if we conform ourselves to the opinion of the most celebrated physicians, who would have it mixed with a quintessence of vipers, a thing that augments its virtues very considerably, and leaves nothing wanting for a radical cure.

As in the course of this work I shall have occasion to speak of mercury, and make its virtues more and more known, I will end this chapter by saying of this mixt what I have already said of the pocky taint, though  
in



in another sense ; it is a Proteus, which assumes all manner of shapes.

C H A P. II.

*Concerning the purifications and preparations of mercury.*

THERE are some truths so striking, that all the world are forced to assent to them ; of this nature is that in general about the purification of mixt bodies, of what genus, species, or kingdom soever, in order to separate the pure from the impure ; however it is not sufficiently attended to, and unhappily it is neglected. But be that as it will, I shall not insist upon establishing, that all the beings in nature require a purification and preparation ; that each of them, more or less, has its excrementitious impurities ; we will only say, that mercury, amongst all the metals, is that which has the worst sort of impurity, and, consequently, that which has greatest need of preparation and purification. In fact, we are not ignorant of the ravage it commits in the human body, when it is ill administered ; nor of the fatal effects it produces upon those whose business it is to take it out of the mines ; and that only malefactors are employed in that work. In fine, we know the prejudice it does to tradesmen who use it in their business. Even the land which lies near the mines where it is, is barren, and the little it produces, at a certain distance, is killing.

killing. I am not at all surpris'd, if Fernel, and other learned physicians, have absolutely advis'd not to make use of mercury, looking upon it as a very pernicious and mortal poison. But these learned men, learned as they were, without doubt were ignorant of its purifications and preparations, in such a manner, that the experience we have of its poison is a plain conviction of the excellent virtues it contains ; *ubi virus, ibi virtus* ; where there is poison, there, there is virtue.

*The first purification and preparation of mercury, as practis'd by the author.*

Take as much as you please of revived mercury, mineral cinnabar ; or take common cinnabar, which must be reduced to an artificial cinnabar in the ordinary manner, which Lemery teaches very well ; afterwards revive it with filings of very clean steel<sup>a</sup>. This revived mercury wash with vinegar and salt, then dry it with a linen-cloth, and pass it through shamois leather. In this state it must likewise be killed in the usual manner, and reduced to a powder with spirits of nitre<sup>b</sup>.

This

<sup>a</sup> This reviving may be performed with salt of tartar and quick lime, and it is even preferable to that with filings ; it is true, it costs a little more, and the process is more tedious ; but when the question is about making the best sort, the trouble and expence should be no hindrance.

<sup>b</sup> This solution is made with equal parts of mercury and good spirits of nitre, poured upon the mercury, by little and little, in a glass laid in a gentle ash or sand-heat, either to procure a greater action in the spirits of nitre, and that the solution may be quickly made ; or that after the solution shall be made, we may, if we will, cause the spirits of nitre to evaporate by a slow heat.



This done, you will sublime it for three times with vitriol and nitre, perfectly purified<sup>c</sup>; then make the whole into a powder separately, in a marble or glass mortar, and mix with the mercury an equal weight of each, which you will put into a glass retort<sup>d</sup>, two-thirds at least empty, and you will fit a recipient to it, for receiving the spirits from the vitriol and nitre; and after giving a very soft degree of fire for two hours, you will heighten it gradually, till all the spirits are come over into the recipient, which you will know by the blanching of the upper part of the retort, by the subliming mercury; then increase the fire in order to finish the sublimation, which will hold you for about four hours longer.

After your sublimation is finished, and the retort cooled, you will break it, and take out all the mercury sublimed to the top, and in the neck<sup>e</sup>, which you will reduce to a powder with

<sup>c</sup> We must always observe it as a circumstance highly essential, that the intermediate bodies, which shall be employed for making the sublimations of the mercury with, be pure and untainted; otherwise their impurities will add to the impurities of the mercury, instead of removing those it naturally has. The vitriol must be dried to whiteness by a gentle degree of heat, which shall only evaporate its phlegm, and not its volatile spirits. No other purer and more perfect nitre can possibly be used, than that whose preparation we have taught in the posthumous works of M. de Grimaldi, and which we must use preferably to that of the third or other boiling.

<sup>d</sup> The retort must be luted for three-fourths of its capacity with a good luting. In our sublimations we use a retort and recipient preferably to aludels, bolt-heads, and other vessels, as we would preserve the spirits of vitriol, nitre, or salt, which, in their passage, penetrate even the body of the mercury.

<sup>e</sup> This observation is highly necessary, and cannot be too much recommended: We must take of this sublimate mercury only

with a glass pestle, in a mortar of the same kind, and searcing it, you will continue to mix it with a like weight of pure vitriol and nitre; and putting this mixture into a new glass retort, you will pour to it the liquor which came over in the first sublimation into the receiver, and that with some precaution<sup>f</sup>; then place your retort in the sand, and proceed with a second sublimation, which you will conduct as the first; and make a third in like manner, which will be three sublimations of the mercury with the vitriol and nitre. After having thus performed these three sublimations, you will continue to make seven more, with equal weights of decrepitated sea salt alone, highly purified<sup>g</sup>; you will conduct these sublimations, with the salt, in the same manner, and with the same circumstances, as was explained for the vitriol and nitre, renewing at each sublimation the salt, and impregnating, in the same manner, the

only what is hard, compact and crystalline, and reject, as pernicious to every sublimation, what is light and volatile, and in form of a loose meal sticking to the glass, and which is the most poisonous part of the mercury.

<sup>f</sup> These spirits must be poured with precaution; that is, gradually, for fear lest the too great violence and suddenness of their action should break the retort.

<sup>g</sup> The salt must be purified in the course of the decrepitation, and then the several desiccations, lotions, or solutions, be made in good clear and neat rain water, together with the evaporations and crystallisations. It must also be observed, that it is necessary to use, as an intermediate for the salt, an equal weight of white glass, clean, and grossly pounded. This intermediate body has nothing, and can therefore impart nothing: the only reason of adding it is, to prevent the matter from sinking too low, and to favour the sublimation.



the mass with the spirit which passed over into the recipient <sup>h</sup>.

*The second operation.*

Take the mercury, which you have sublimed, reduce it to a fine powder, with the requisite precautions <sup>i</sup>, and <sup>k</sup> put it into a good matrafs, or bolt-head, and pour upon it a little of the universal solar and astral <sup>l</sup> spirit, so that

<sup>h</sup> The spirits remaining after the sublimations, both of the salt, the vitriol, and the nitre; will make a perfect aqua fortis, or aqua regia, which, upon occasion, will serve to perform all sorts of metallic and mineral solutions.

<sup>i</sup> This mercury, thus purified, prepared, and sublimed in this first operation, is fit to relent, or give of itself, become a water, spirit, or oil; and, with the proper additions, be a cure for the disease intended to be treated. A mercurius dulcis may be made of it, or it may be revived, and brought back to running mercury, and then be more effectually used for frictions, precipitates, and generally any preparations and remedies at pleasure; this preparation and purification being the point from which we ought to set out in treating mercury. And yet a long course of study, of painful labour and toil, and a happy experience, have taught us, and with ardour and pleasure we impart it to the publick, that the remedy we give is the best, and the most efficacious, that can be prepared and administered for a radical cure; and yet this shall not hinder me from giving other preparations still, both the fruit of my own labour, and of the most celebrated artists. I conclude these remarks with a reflection, which I address to the genuine physician, whom I shall always have a great regard for; you cannot be supposed sufficient for every thing; I give you what is good and excellent, and I beg of you to accept of it for the publick benefit, and to put it in practice. Far be from us a mean and base jealousy; I agree, with these gentlemen, that to distinguish the good, and perform it, is far more glorious than to have discovered it.

<sup>k</sup> Because it is extremely active and corrosive, and may hurt and prejudice the health.

<sup>l</sup> We shall explain, in the body of the work itself, the astral spirit, and the manner of procuring it; in defect of which we may use a pure spirit of may-dew, purified, dephlegmated, and

that at first you will only put to it what may serve to moisten it ; close up, very exactly, the matrafs, or bolt-head, with a good lute, together with its capital and recipient, and placing it on the lukewarm ashes, leave it to the same degree of heat for twenty-four hours ; after which, opening your vessel, you will imbibe afresh the matter with the same spirit ; close up again the matrafs, and leave it to the same degree of fire for the same time as before ; which you will continue to do in the same manner, till your mercury has drank up almost its weight of this spirit, or refuse to drink any more.

Take then, for instance, a pound of your sublimate, such as we have prepared it, and as much of the filings of steel, neat and fine ; rub the sublimate very fine, and add to it the filings<sup>m</sup> ; put the mixture into a cellar, or other cool place, upon a glass table, with a ledge and beak<sup>n</sup>, under which must be placed

and rectified at least seven times. And as we design to omit nothing that may be of utility, we apprise, that the astral spirit should, in like manner, be dephlegmated, before using it for imbibitions ; and that when we purify this spirit by distillation, the spirits rise first, then the phlegm, at last an oil, or a fixt spirit ; the phlegm only is to be laid aside, and the two volatile and fixed spirits joined together ; consequently, the recipient must be shifted. As to the phlegm we have separated, it is necessary for dissolving and purifying the fixed salt, which shall remain at the bottom of the vessel, after the distillation of the spirits, mixed with a terrestrial matter, of which it shall be discharged by the said phlegm.

<sup>m</sup> It were much better to put, instead of the filings, some sulphur, or crocus martis ; that is my method. I shall have occasion to teach the manner of preparing it, when I come to treat of the gonorrhœa and its consequences.

<sup>n</sup> This ledge may be made with wax and pitch worked up together ; or you may use a plate of tin.



placed a glass vessel, with a funnel, furnished with a single filtering paper, to prevent the impurities from passing into the liquor. At first there will run down a yellow liquor, which arises from the re-solution of the iron and mercury, and which must be carefully kept; and after the re-solution is finished, take what remains upon the plate, and put it into a glass cucurbit or body; pour on it some distilled rain-water to the height of half a foot. To extract the salt, digest it by an ash-heat, and often moving and stirring the matters, at the end of three or four days filtrate the solution with double filtering-paper, and evaporate to a salt, which must be re-dissolved, filtrated, evaporated, and crystallized several times, till it is pretty pure; then cause to dry it very softly, and make it into a powder, which must be mixed with the yellow liquor you have preserved, and it will turn of a very beautiful red; pour the whole into a low cucurbit of glass, on which you will put a head, with a short and thick beak, to which you will fit a proportioned recipient; lute the junctures, and distil by a sand-heat: by giving the fire gradually, there will arise at first a phlegm; and when you see the yellow vapours begin to appear, you will shift the recipient, and encrease the fire; this yellow vapour will condense to a red liquor, which in part shall fall into the recipient, and the rest, which will be too thick, will fasten to the body of the head and the beak: this

done, the vessels must be left to cool, and the head took off, without removing what is condensed therein; then with the phlegm, which came off the first, the sides and edges of the cucurbit must be washed, where will remain sticking some of that red matter, which must be returned upon the caput mortuum, remaining at the bottom of the cucurbit, if it is not cracked, if it is, another must be taken; but, as was said, what was found condensed in the helm and beak, must be left untouched, because that after luting, and beginning the fire for repeating the distillation, as soon as the alembick is heated, and the vapours begin to rise, what is in the helm will resolve to a red liquor, and run into the receiver: as soon as this red liquor shall have passed, the receiver should be shifted, in order to receive the phlegm; after which there will still arise some of the red liquor, which should be received apart, and put to the other; these distillations and cohobations must be repeated in the same manner, till nothing red arise: then all the red liquor must be put into a cucurbit covered with its capital, and some alcohol of wine be poured on the said liquor, to the height of four fingers breadth; then digest and circulate together, in a vapour heat, for three weeks, at the end of which, you must draw off the spirit of wine, in balneo-mariæ, by a very slow distillation; you will then add to your red spirit half its weight of pure spirit of dew, or of the astral spirit;  
and



and having very accurately luted the vessel, lay it on hot ashes, and make it boil, by a gentle, equal, and continued fire, for a month; after which you will rectify the whole together, without separating any thing but the gross parts which might happen to remain at the bottom of the retort; and you will repeat your rectifications, at least five times, which will compleat the dulcifying and perfecting your mercurial spirit.

The dose is from two to six drops, in a proper vehicle, such as the spirit and decoction of guaijac, aqua theriacalis, spiritus theriacalis camphoratus, spiritus vitæ Paracelsi, or even the tincture of saffrafras and china-root.

*Mercurius dulcis.*

Take any quantity, at pleasure, of our sublimate; the same weight of this same sublimate, which were to be revived and made into a running mercury, as we have taught it; grind the mixture together in a marble or glass mortar; put the matter, which shall be amalgamated by means of this trituration or grinding, into a matrafs, filled one-third, and placed in a sand heat; you will give a soft fire for two hours, for the matters to bind and unite the better together; encrease the fire to the degree sufficient for making the sublimation, which will hold you for about seven hours; your sublimation being done, open your matrafs with a ring of red-hot iron;

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you will find, if the operation is duly performed, two sorts of sublimations of mercury, the one compact and crystalline, which is the mercurius dulcis sublimatus, and found above that which is spongy; remove, with attention, all that is in the form of a loose meal, for the reasons already assigned, and the coarse parts, which shall have remained at the bottom of the matras; grind, rub, and mix again these two sorts of sublimations, exactly observing the directions above; proceed to a second and a third sublimation, in the same manner. After these three sublimations, take your sweet sublimate all alone, and proceed without any addition to a fourth and a fifth sublimation, always removing, with care, the coarse part, and that volatile matter; then you will have a perfect mercurius dulcis, which shall have lost its laxative virtue, and be a good diaphoretic, proper to answer your intentions.

*Musitanus's diaphoretic mercury.*

Take a pound of running mercury well purified, make a solution of it in aqua fortis, and repeat four cohobations; by putting always fresh aqua fortis thereto; pour three ounces of butter of antimony, or twelve ounces of aqua fortis, or spirit of nitre, upon the red precipitate, which must be done gradually; draw off the acid spirits by distillation, and cohobate five times more; at last urge with a violent fire, which shall make the vessel;



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vessel, which should be of glass, red-hot; after that the matter must be removed out of the vessel, and reduced to a fine powder; pour thereon twelve ounces of spirit of wine rectified, but not by alkali's, and draw it off by distillation, and pour still some fresh thereon, which you shall repeat to twelve times.

Musitanus was a very able physician of Naples, and a priest too. Envious people opposed him much, which obliged him to have recourse to the protection of the Pope, who allowed him to practise physick. He understood perfectly well the manner of treating venereal diseases, on which he has writ a particular treatise, which is in great esteem. The operation just now described was the remedy he commonly employed in the cure of these maladies, and so he gives it great commendations: he pretends we have a fixed mercury, not corrosive, which acts by insensible perspiration; the dose is from four to six grains.

### *Turbith mineral.*

Take an ounce of revived mercury, two ounces of oil of vitriol well rectified, pour the oil upon the mercury gradually in a glass retort, put it in digestion for three days, afterwards draw off the oil of vitriol by a graduated fire, which at last shall be highly violent and raised; the oil of vitriol having ascended and passed into the receiver, the mercury remains in the retort in a white mass of

salt, on which you must pour some filtered rain-water, and immediately it turns of a yellow colour, and the water tastes acid; you will continue pouring on, and decanting repeatedly, till the water comes off insipid and tasteless; the powder is to be well dried.

The dose is from three to four grains, 'tis used to cause a salivation in the pox; it at first purges both upwards and downwards, and afterwards it salivates.

I know not how it is, that this preparation is commended, and less still, how one can venture to administer a remedy of such violent effects, and almost always hazardous. Besides, this preparation is very nice, and requires a good deal of address and attention in it. The retort should be placed in a manner, that the drops ascending in the course of the distillation fall not upon the sides of the receiver, but all in the middle. The neck of the retort should be covered with sand to pretty near its belly, to the end the drops of vitriol fall not back into the vessel in cooling, which would cause it to burst. What pity it is, one should be in such want of other good subjects, to be obliged to throw away one's time on such operations as these!

#### *Essence of mercury.*

Take some mercury, put it into a crucible, cause it to heat till it is just upon the point of evaporating, quench it in spirit of lead in a marble mortar, which you will directly cover;  
ver;



ver; repeat this for several times, till the mercury be hard as silver; quench it afterwards in spirit of sal armoniack, make it into plates, quench it in a lixivium of tartar; after that, make a solution of it in spirit of vitriol, precipitate it with the solution of common salt, edulcorate and dry it, afterwards melt it in a sand-heat in a glass vessel, to a yellow liquor like wax. From this rosin we, in three days and three nights, extract a precious ointment, by means of the spirit of dulcified salt, or spirit of tartar, it may be given without any hazard. The dose is from five to eight drops in the capital diseases; it works by sweat, cures every catarrh that causes the apoplexy, epilepsy and vertigo; penetrates the body, cures the dropsy, and inveterate swellings of the legs and thighs.

*Oil of mercury<sup>a</sup>.*

Finely powder an ounce of our sublimate, put it into a bolt-head, pour on it four ounces of spirit of wine, well rectified on the cotton, or flowers of zink; stop well your bolt-head, and let the matter soak in the cold for twenty-four hours, the sublimate will be dissolved; but if any thing had remained, decant off the liquor, and putting to the matter more spirit of wine, cause it to soak as before, in order to compleat the solution; mix your several

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solu-

<sup>a</sup> This oil is good in venereal shankers; put upon the affected part with bolsters, it eats away the flesh, and stops a gangrene.

solutions, and keep them in a phial well stopped.

*Red precipitate without addition.*

Take any quantity, at pleasure, of running mercury, have a little bolt-head of the bigness at least of a gallon, with its neck raised and strait, the bottom flat and even, without eminence in the middle, to the end the mercury you shall put into it may be equally extended on the whole surface of the bottom, which is not to be thicker in one place than another, for the fire to act equally upon it; put into each of these bottles four ounces of mercury, and place them in sand on the athanor; begin with giving them a small fire, which continue on exactly from one degree to another, till the mercury is changed, precipitated, and baked or nealed to a powder which is red and shining, and which must be digested, for three weeks, with alcohol of wine, and afterwards fired seven times a-top, which will compleat the baking and fixing it.

*Observations upon this important operation.*

All good authors are unanimously agreed; that it is an universal mercurial remedy in fevers, and infallible in intermittents, a genuine specific for the pox, which it cures radically, by giving it to the patient at seven different times, every twenty-four hours, taken in the morning on an empty sto-

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mach,



mach, in bolus, in a little conserve of roses, to cause sweat, for it is an excellent sudorific. It kills the worms in the stomach, and those which breed in the intestines; the dose of it is from two to eight grains; it causes a strong perspiration, excites vomiting if needful, removes obstructions, and cures, without relapse, every kind of rheumatism and ischiatic.

These are in part the virtues assigned to this preparation of mercury, at which I am not at all surprized, tho' I cannot help being in an extraordinary manner surprized at what the same authors say at the same time, that this remedy is but little used in physick, on account of the difficulty there is to prepare it, and the length of time the preparation requires. Alas! can too much pains, or too much care, be taken towards the relief and cure of poor afflicted patients. I myself have of this mercury, and daily make of it in my laboratory; to the poor I give it gratis, to the rich I sell it at a reasonable rate.

The alchemists have added the epithet, *philosophical*, to the operation, not only because they have invented it, but because they pretend, and with reason too, that to succeed well therein, it is necessary to observe each degree of the fire, and continue it for a philosophical month, which is forty days.

I have experienced, that a circulatory, a great bolt-head, and other vessels, were not so fit for this operation, as several small bolt-heads,

heads, as I have already explained it, which are far more commodious; besides, the mercury being divided into many parts, receives better the impressi<sup>o</sup>n of the fire.

We may alledge as one of the reasons, that the reduction of mercury to a red powder, proceeds from the small particles of the fire, which are introduced into its pores, and which have rarefied it, and imparted to its insensible parts still greater dispositions to motion than they naturally had: for this very reason its diaphoretic quality is augmented, and it causes, in many stomachs, irritations to vomiting, when they stand in need of it.

If the operation has been well performed, there are no hopes of being able to revive this mercury, by the ordinary methods, to running mercury, like the other precipitates; there is no other way of succeeding in it, but by the same means which I use to draw running mercury from gold and silver, &c.

Nor can we any more hope to be able to give this powder any other colour than the red which it has acquired, which is the most perfect, by baking and nealing, and disengaging it from its phlegm, which, according to the expressi<sup>o</sup>n of Raymund Lully, made it sick and hydropical; as is also done to other precipitates, or corrosive mercury, in the manner following:

Take six ounces of corrosive mercury, reduce it to powder, pour upon it twelve ounces of hot water, clear and neat, rub the whole,



whole, and let the liquor settle, and gently decant it off, filtrate it, and divide it into three parts, which you shall put into three different phials; throw into one of these phials a few drops of oil of tartar per deliquium, there will incontinently be made a red precipitate.

Pour into another phial some drops of volatile spirit of sal armoniac, there will fall down a white precipitate.

Mix into the last of these phials, between five and six drops of lime-water, and there will arise a yellow water, which is what is called *phagedenic*, or ulcerary, and is used for deterging and curing ulcers.

These changes in the colours of these precipitates are owing to the acids, which having been differently broken by the alkali's, arrange and figure the parts of the body precipitated, in a manner as to be capable of exciting different reflections of the light.

*The quintessence and reduction of mercury into water, by means of its distillation without any addition.*

This operation is highly difficult, and requires all the sagacity of the artist who would undertake it. Many learned persons greatly prefer this simple spirit to the compound, because the parts of the mercury are not discontinued, nor opened by the assemblage and addition of the salts or spirits, and consequently

quently receive not any impressi<sup>o</sup>n from their mixture ; 'tis done thus :

Cause to adjust upon your furnace a crucible, which may be half a foot above the grate, lute over this crucible a stone cucurbit a foot and an half in height, and perforated above and below equally, for receiving the edge of the crucible within and a-top, for the conveniency of putting a large glass capital over it ; there must also be a small square aperture of an inch, over the edge which receives the crucible, with a stopple which shuts tight, for the convenience of throwing the mercury into the crucible ; the junctures both of the crucible and lower part of the cucurbit must be very closely luted with a good luting, as also the juncture of the capital ; this done, a gradual fire must be given, in order to begin to heat the crucible, and which is to be always encreasing, till the neck of the crucible is red ; in this state the mercury is to be ready at hand, and about two drams of it poured at once into the crucible by the square aperture, which must be directly stopped ; the mercury will pass into the recipient in vapours, which will be reduced in part into running mercury, and in part to a clear liquor : and thus you must continue pouring and putting in mercury, till you have enough of it.

The recipient may be removed, and another substituted in its place, in order to remove the distilled liquor, and separate from it



it the quicksilver which shall be in body or consistence, and for continuing the distillation with this very mercury, which is equally good with any other. . This spirit must be rectified in balneo mariæ, or in an ash-heat ; by its subtilty it penetrates all bodies, and expels all their impurities, by sensible or insensible perspiration, principally by sweat ; malignant and sordid ulcers may be bathed therewith, and particularly those which proceed from a pocky venom ; the dose is from one to four drops in treacle water.

There are many beautiful preparations of mercury, which I might relate, but that would swell this book too much ; such as want information, may consult both the ancient and modern authors, who have treated of these matters. We have had in these last days very able chemists, the Glaubers, Hombergs, Febvres, Lemery, Geoffroy, Rothe, and many others ; their writings, which may be seen, and the collections of the several academies, will give full satisfaction. And in this respect I shall only relate what is properly my own, and what I have acquired by dint of labour and experiments. The principal thing here is, the performance, and not the simple speculation and theory of operations ; 'tis by practice alone we can arrive at a perfect knowledge, and acquire that beautiful science, that principal part of natural philosophy, so essential to physick, and highly superior to all others, which for the  
most

most part are founded only on reasonings, which every one forms in fancy, a region of a vast extent, and wherein the climates are so very different; whereas chemistry is founded on reason and experience.

If anatomy instruct us in the knowledge of the springs of the machine, which is the object of physick, chemistry gives us a solid insight into the liquors which nourish and support these springs. Moreover, what anatomy fails in, chemistry supplies us with the remedies, which alone are capable of curing an infinite number of diseases, as has been already demonstrated.

I might in like manner, without departing from my subject, relate certain preparations of mercury, which have made a good deal of noise, and which have been in vogue; as those of La Vigne<sup>a</sup>, Ducay<sup>b</sup>, Rotrou<sup>c</sup>, La Brune<sup>d</sup>, and many others: but, besides that these remedies are at this day well known, they become unnecessary, and are superseded by those we here give the publick, and which are far better. I shall therefore conclude this chapter, with the preparation of the fixed, philosophical

<sup>a</sup> De la Vigne, physician to the king, and of the faculty of Paris, has given a preparation of mercury, which is called panacæa, or solar and lunar red precipitate.

<sup>b</sup> Gervais Ducay, a physician of Thoulouse, another precipitate.

<sup>c</sup> Rotrou was a surgeon of S. Cyr, who has given some remedies for the king's-evil, and for cold œdematous humours.

<sup>d</sup> La Brune was a chemist, who sold his secret to M. de Louvois the minister. 'Tis used at the hôtel royale des invalides; 'tis a mercurial preparation, pretty well made, and which differs little from the ordinary panacæa.



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sophical mercury, without any corrosive addition, which is the genuine panacæa, both mineral, animal, and vegetable, and which will never disappoint the expectations of the physician and patient, when discreetly used. I shall add to it a perfect quintessence of viper, which is one of the ingredients of this excellent remedy.

*The fixed philosophical mercury, the animal, vegetable, and mineral panacæa, without corrosive.*

Take six ounces of our red precipitate, the preparation of which we have given above, p. 104. Reduce it to an alcohol, put it into a glass body, add to it four ounces of spirit of wine, four of essence of vipers, (whose preparation shall be given hereafter) six ounces of animal bezoar, lies made of the ashes of guaijac, box-wood, saffrafras-wood, juniper-wood, china-root, dock-root, scorzonera-root, great valerian-root, zedoary-root long and round, seven ounces each. After having extracted from them all the salts, they are to be well ground and mixed with the rest in a cucurbit with its capital, to be luted with a good lute, and placed on the athanor, in a sand-heat of the first degree, extremely moderate; the matters are to be left to macerate for twenty-four hours, stirring them three times a-day; afterwards the matter being well imbibed, penetrated, and without any moisture, the vessel is to be left to cool, and the matter to be

be taken out, and to be ground anew in a glass mortar, and reduced to an impalpable powder, which shall be kept in a crystal bottle well stopped; and this proves a genuine specific in the pox, and all its concomitants, and affords the greatest relief in all physick for all chronical distempers, a truth not to be refused by any one ever so little knowing in matters of remedies, and their preparation, and is what is confirmed by a happy experience of persons to whom we have given of it. The dose is from four to six grains, and even to twenty in opiates, pills, conserves, extracts, and other proper vehicles.

*Volatile spirit of human urine.*

This spirit is only the volatile salt resolved in a little phlegm, which is done by the way of distillation of the urine, and by the separation of the oil and phlegm. We may even have of this spirit without fire, by mixing urine evaporated to the consistence of a syrup, in a glass or stone cucurbit, with some quicklime, and adapting to the cucurbit its capital and recipient well luted; the lime heating the urine, a spirit distils into the recipient, which has the same virtues and properties with that which is procured by the ordinary distillations; is even more subtile, because the small igneous bodies of the lime will be mixed therewith. These spirits will be particularly good to make luminous phosphorus's with; such as would work upon urine, will do well to



to use that of a young sound man, vigorous and of a good constitution, and such as is newly made, because it contains more salt.

*Animal bezoar.*

'Tis the liver and heart of the viper, after being dried and pulverised; they have the same virtue as the powder of viper, but they act with a greater efficacy when given alone. The dose is from six grains to half a dram.

*Lixivial salt.*

The salts of mixts are divided into three sorts, fixed, volatile, and essential. The fixed, is that extracted after calcination; the calcined matter is boiled in a great quantity of water, for the salt to dissolve; the solution is strained thro' filtering paper, then all the moisture is evaporated, till the salt is found dry at the bottom of the vessel. The salts of plants procured in this manner, are called lixivial.

The volatile is that which sublimes with ease, when heated, as the salt of animals; and the essential salt is that which is drawn from plants by crystallization; this last is a mean between the fixed and the volatile.

Nothing has so great a proximity as the two extremities; I may say, in this sense, that nothing approaches to, nor equals more the pleasure I have, of communicating to the publick the composition of the essence of viper,  
I than

than the trouble I have had to arrive at the perfection of making it.

The great commendations which all good authors have bestowed upon this remedy, which, with reason, is considered as a sovereign specifick in the most obstinate, the most cruel, and considerable maladies, have given me room to examine, with the utmost accuracy, the reasons, the causes, the effects, the manner of treating, and generally every thing that has a relation to the composition, administration, and use of this remedy.

This is no novel remedy; I mean the knowledge of the virtues of the viper. Galen has maintained, that a viper, suffocated in wine, has cured the leprosy, and surprisingly purified the mass of blood: this method is still followed in some countries; women of a gallant air, and curious about their health and beauty, make no scruple to suffocate live and whole vipers, with a view to preserve their charms, their gracefulness, and their good plight, and to prevent the approach of wrinkles and other mortifying accidents; in all which I see nothing that is discommendable. The most noted courtesans of Italy guard themselves against the venereal disease and its consequences, by taking, in the spring and fall, the broth of fowl with the flesh of viper, and china-root.

Cardan means to communicate a grand secret to the archbishop of St. Andrews in Scotland, by informing him, that the viper radically



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cally cures the consumptive, the leprous, and the poxed ; that it fattens and restores them beyond expectation. Take, says he, a viper, cut off its head and tail, skin it, throw away the entrails, and save the fat ; cut the viper in pieces, boil it in a sufficient quantity of water with benjamin and salt, and at last add parsley leaves ; when well boiled, strain the broth, and boil a pullet in it ; in this new broth soak some bread ; give of this broth to the patient, and make him eat of the pullet ; continue this food for seven days successively, keeping the patient warm, and rub him with the fat of the viper along the spine of the back and the joints, as also the arteries of the feet and hands, and the breast : by this means the ulcers of the lungs are cured, being expelled, in tubercles and other eruptions, to the surface of the skin.

Quercetanus mentions no less surprising things about it, in his *pharmacopœia dogmatica*, and generally all the authors of any weight are of the same opinion ; it was the specifick remedy used in the cure of the pox by Sebastian Aquilano, James Catanée, and John Beditto.

But the great stumbling-block has been in the manner of preparing, and of treating it ; when the intention was to procure something more exalted and superior to the gross preparations ; I mean, its pure volatile salt, a genuine quintessence, and to take from it its stench and bad taste.

We see the great efforts which the most celebrated chemical physicians have made to this purpose. Zwelfer, physician to the emperor, whom we may justly rank of the number, in the remarks which he has made on the Augsbourg Dispensary, has attempted several ways of removing these two capital defects; and could not succeed, but by depriving these volatile salts of their subtlety, and consequently of their penetrating and diaphoretic virtue; which he did by adding acids, which fixed the volatile alkaline salt of the viper.

Zwelfer himself, and Nicolas le Febvre, that skilful and experienced artist, were sensible of the necessity and importance there was of removing this acid, and they made use of several expedients for that purpose, but all in vain.

M. Lemery, in his course of chemistry, without mentioning any one, observes very judiciously, that he could not approve of the method of those, who, to divest the volatile salts of their disagreeable odour, mix them up with spirit of salt; for that spirit fixing in part the volatile salts of the viper, and destroying, by its acidity, their quality of alkali, diminishes its virtues, which should be those of rarifying the gross humours, dissipating a part of them by the pores, and of destroying the acids, which are in too great quantity in the body.



It is necessary to preserve all the efficacy and energy of this volatile salt, and not to change its essence by any addition ; since it is certain that this volatile salt, which rarifies the humours of the body, both because it is extremely penetrating, as because, being an alkali, it breaks the force of the acids (without injury to the volatile substances) which keep the humours condensed ; after which the blood, having a brisker motion than it had before, clears itself with more ease, either by perspiration, or by urine, of the heterogeneous matters which were amassed therein.

We should expect from the abilities of M. Lemery, that having observed the defect of the artists his predecessors, in the composition of the volatile salt, and in the essence of the viper, he would have furnished us with the sure means of remedying it ; but, unhappily, his preparations labour all under the same defect.

It was therefore in some measure necessary to be provided from some other quarter, and to redouble our attention and care, and to make new experiments in examining in what those of others had failed. In this examen, I must own, to the memory of the abbé Rousseau, so well known under the name of *Capucin du Louvre*, physician-chemist to the king, that it is he who has been the most usefully serviceable to me. This man, endowed with a happy genius, and born with a disposition for chemistry, has led me, as it were, by the

hand, at the instant that I despaired of success, and was upon the point of giving up all.

I sincerely own, that it is to him I am in part indebted for the success of this admirable remedy, quite simple in itself, and without addition, and for having preserved all its virtue, its efficacy, and its properties, and for being freed of its bad scent and taste, without making it lose any of its penetrating, volatile, and alkaline virtues.

There has been a question started among the learned in regard to the venom of the viper, which, to do it justice, is rather a witty conceit, than a question of any usefulness for procuring the health of the body; I shall not, therefore, stay to discuss it.

I could with equal ease, as Van Helmont, Poterius, Charas, Redi, and others, have given myself scope, and enlarged on these matters; but all this would only serve to gratify a little my own vanity, disguised under the specious pretext of being useful to my reader. To make him still more conceive the excellence of the remedy I give him, in order to make the proper application of it, and to be able to derive from it the salutary effects which I have proposed to myself, it will suffice to know plainly and ingenuously, that it is a sovereign antidote in all venereal diseases, and the most efficacious preservative against these disorders, when prepared and administered in the manner I teach. The *modus* and reason of these things, I pretend not to deduce



deduce *a priori* by metaphysical reasonings. We ought to be contented to know, that it is the will of God, that they produce in us such and such effects, and the whole bent of our minds should be employed to return our sincere thanksgivings to the Creator, for giving us, by an effect of his goodness, so great a remedy for the cure of our diseases, which very often, if not always, are the effects of our own disorders.

I well know that man is not a mere machine, but formed with a capacity for reasoning, which is one of his noblest privileges; but at the same time I know, that very often, from an affectation of running out into subtle reasonings on causes and effects, he falls into illusions and chimera's, into gross and wretched errors. How many famous instances, to this purpose, might be alledged of those, who, to the reproach of humanity, have usurped the pompous and magnificent title of philosophers, while, at most, they deserved but that of illustrious visionaries. But, without farther preamble, here follows this admirable remedy.

*The essence of viper, or the anti-venereal, of the preparation of the author.*

Take a sufficient quantity of vipers, which you must dry in the sun till they can be reduced to a powder; this powder you will scarce in a sieve covered with silk <sup>a</sup>.

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Of

<sup>a</sup> It is necessary to perform this operation in the month of May, or in the beginning of June.

Of this powder, thus prepared, take, for instance, four pounds, or any other quantity, at pleasure, with thrice the weight of good Narbonne<sup>b</sup> honey: mix and put the whole into a good and staunch bolt-head of glass, filled two-thirds, which you will place in the stove, and leave to ferment: when the fermentation is over, the whole must be poured into a great vessel, and the slime, which is found at the bottom like pus, be stirred up; then all these matters are to be conveyed into the distilling vessel<sup>c</sup>; the recipient and the capital must be well luted, and the distillation be performed in a sand-heat, while the matter boils and works in the body or cucurbit, which should be filled only to a third of its capacity, because of the swelling and heaving of the matters, which would otherwise burst the body<sup>d</sup>.

After

<sup>b</sup> Narbonne, a town of Languedoc, very ancient, whose archbishop is primate of the Narbonnese Gaul, and president of the states of the province. The honey, which is produced in its territory, where there are a great many bee-hives, is very excellent, particularly the king-honey, white, and smelling of violets.

<sup>c</sup> It will be observed, contrary to the ordinary course of the distillation of all other sorts of flesh, that the spirits and the volatile salts rise first before the phlegm. These spirits have so great a degree of penetrancy, that there is difficulty to hinder their getting through the luting at the juncture of the vessels; 'tis here, that both the address and the patience of the artist, are equally necessary.

<sup>d</sup> To obviate every mistake, here follows the manner of doing this distillation, or evaporation of the phlegm. After having drawn off, by distillation, as has been explained, the spirits and volatile salts, which are left on the fire, for the phlegm to evaporate, the whole, if you will, may be poured into earthen pipkins, to have the sooner done; but it is much better,



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After all the spirit and volatile salt has distilled, and that the phlegm is in like manner distilled apart, or evaporated to driness, at a slow fire, what remains at the bottom of the alembic must be taken out, powdered, put into a luted retort, and distilled by a gradual reverberatory fire, to extract from it new salts, and a black and pungent oil, which is to be rectified two or three times at least; it will only be a better way, for a greater degree of perfection, to mix and knead up these volatile salts, oils, and spirits, with ashes well elixated,edulcorated and dried; and distil and redistil them afterwards, till the whole is pretty pure, and has deposited all its empyreuma and bad scent. As to the fixed salt, you will extract it from the caput mortuum; after this last violent distillation, which you will do in the common manner, by elixivation, filtration, and evaporation; you will take care to purify well this salt, by many repeated solutions, in the phlegm, or in rain-water, till it is very pure, and very white, and melts in a soft heat like wax. The salt being thus prepared, you will add it to the spirit rectified repeatedly, and perfectly dephlegmated, which you have combined with the oil and volatile salt, and mixing the whole in a bolt-head with a long neck, perfectly well

better, simply to remove the recipient, into which the spirits and volatile salts shall have passed, and apply another, to continue the distillation, in order to preserve the phlegm, which has great virtues in many diseases; among others, those of the eyes, curing every pain, inflammation, speck, and even recent catarrhs; it surprisingly preserves the sight.

well stopped, you will put it in digestion in the soft heat of ashes on the athanor, for fifteen days, to the end that an homogeneous whole, and a genuine and perfect quintessence, may be made of all its parts.

Its colour is a beautiful yellow, as if it were a tincture of gold, without any taste, odour, or sign of a brandy or honey; because honey, by the universality of its nature, assimilates with every thing in the fermentation, chiefly with vipers, which are almost only nourished by the spirit of the air, of honey, and the dew, which they lick upon the plants.

There is a degree of patience requisite to the performing this beautiful operation; and I cannot imagine that an artist, who is acquainted with nature, can forbear owning, that this essence, being made as I have described it, is not something uncommon and invaluable, and worthy of the largest commendations, seeing it preserves health and life, restores the vigour of old people and languishing patients, and, in a word, repairs nature in all its extent. Its virtues are admirable for its penetrancy and surprising action in the most desperate cases, especially upon giving of it an hour after an emetick, in apoplexies or lethargies, restoring suddenly both the use of speech and of reason.

It is extraordinary for women in child bed, for the disorders of the sex, in slow and malignant fevers, the purple and pestilential, and in intermittents; in the small-pox, the epilepsy,



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lepsy, or falling-sickness, the apoplexy, palsy, ischiatic, rheumatism, gout; in hysteric disorders, and generally in the stinging or bite of all venomous beasts.

'Tis one of the greatest and most infallible counter-poisons in the world, and a never-failing preservative against all venereal diseases, radically curing the great pox, be it never so inveterate, if added, as has been explained, to the philosophic mercury; and causing, as by miracle, all the symptoms of it to disappear.

The dose is from half a scruple to two scruples, in good old wine, in broth and other liquors, appropriated according to the exigency of the case and circumstances, and the advice of the physician.

*Observations on the composition of this admirable quintessence.*

Tho' M. Rousseau, whom we have followed, mentions not the fixed salt of the viper, which is found, as it were, buried in the caput mortuum, yet we scruple not to admit it into our composition, because it is to be presumed, that it is only by an omission of the editor, who has published his works, or of the printer, that we find not in the book a part so essential and so necessary, as the fixed salt, towards the perfection of the quintessence; a thing which so able and knowing an author could not have been ignorant of, or neglected.

'Tis

'Tis true, some pretender to learning might say, that since all the virtue and efficacy of the remedy derived from the viper consists in its great volatility, far from being needful to add to it the fixed salt, that, on the contrary, it should be entirely excluded, to the end its volatility might not be impaired; but one that would reason thus would be far from doing it consequentially, and would depart from natural principles, as he would be ignorant, that it is only in the center of the fixed salt, that the soul, which is the principle of all motion and of all action, resides; that it is she which causes the spirits, which are the instruments she uses in her operations, to move and to act. That these spirits, resembling, as it were, the hands, arms, and legs of a man, being separated from the body, exercise not the functions thereof, because they are no longer directed by, nor united to the soul; and that if these volatile spirits act upon bodies, without uniting them to their fixed salt, 'tis only because there is always some portion of the fixed salt, which is dissolved by, and united to the spirit; so that by combining and uniting with them inseparably all their fixed salt, well purified, their action will be incomparably stronger, and their virtue more efficacious.

'Tis not out of a fulsome flattery I bestow these commendations on M. Rousseau, 'tis out of a principle of justice. I am well apprised, that when we have made choice of an  
author



author for our model, we are apt to imagine we should do an injury to our own judgment, if we did not load him with the greatest and most pompous commendations; but very often what is more singular is, that the incense we give the author we have adopted, serves also to feed our own vanity; a defect so bewitching, that the most scrupulous are not easily on their guard against it.

No, I repeat it; M. Rousseau was not unacquainted with the necessity there was of combining, in the composition of this remedy, the fixed with the volatile salt; we need only cast our eyes upon his own reflections on this operation, to be convinced thereof; he relates, and puts in its proper light, in some measure, the doctrine of the greatest masters in the art, of whom he was a worthy disciple.

We have but few essences of this sort; operators are well apprised how difficult it is to unite the oils with the salts. There will not fail criticks, who will alledge, perhaps, that it is an easy matter, but we ought to consider them as impostors, till they have given us a method of their own invention for succeeding therein. That of Sylvius was not absolutely perfect; of this we may judge by the physical principles I have laid down, and which Sylvius, who was a very able man, would not have disclaimed. Because, without considering the oil of the second distillation, there is still another more volatile, united

ted by fermentation with the salts and volatile spirits of the first distillation, which has passed over with the phlegm; and thus I mix not this second, and more fixed oil, to render my essence oily, as it is such already, but in order to mix the fixed with the volatile, and to accomplish in this essence the mixtion of all the elements.

'Tis no inconsiderable mystery of fermentation, that it performs the manifest separation of the elements, and brings to light the different properties of what is contained in the mixts, which, without that operation, could never be distinguished; for who could have thought, that in animals there are two sorts of volatile salts, two sorts of oils, and two sorts of spirits. In fine, is there in the whole compass of nature, not to mention the alkahest, any other means known, than that of fermentation to separate them, and exhibit them apart and distinct; which, however, being separated in a way so natural, we cannot help owning, but that it is making a very exact analysis, and a kind of purification and separation of the pure from the impure, the most excellent kind that is to be found in the whole compass of chemistry; and consequently it must be owned, that the re-union of these principles, thus purified and analysed, ought to form a perfection of essence not comparable to any other.

This is the celestial sun, and this the terrestrial sun, of which Cosmopolites speaks,  
and



and which is found in the three sublunary kingdoms, whose rays re-united together, make the miracle of the unity in a simplicity of essence, formed of three principles; *radii radiis junguntur ad perpetranda rei unitatem*, says Hermes.

This should be understood in the same manner in the mineral and metallick kingdom, for Hermes and Cosmopolites have spoken in general of all the three kinds, as it is distinctly particularised in *tabula smaragdina: Habet tres partes philosophia, & tales sunt totius mundi*.

'Tis here the same as in the *great work*, on which the philosophers have written so much, which they say to be composed of male and of female, of superior and of inferior; whose inferior is their mercury, composed in its simplicity of a salt, a sulphur, and a mercury; and the superior is their sulphur, also composed of a salt, a sulphur, and a mercury: 'tis the same, I say, here, where we see the inferior, or the female, which is the mixture of the salt, of the oil, and less subtle spirit; and the superior, or the male, which has also its composition of salt, oil, and spirit, which apart are incomplete and imperfect.

And therefore they must be re-united and married together, as the mercury and the sulphur of the philosophers, which spring from the same root; and then we have a complete essence,

essence, entire and perfect, for the support and prolongation of life.

It is easy to judge, that the wine of Raymond Lully, of which he speaks in so many places, is not a thing remote from this ; for it is known, that the wine of the vine is neither animal nor mineral ; and that by the term *vinum*, we are to understand, a vinous action of each kingdom, which makes its brandy and its tartar after its own manner, and which must be united by volatilization : this is what we find by experience in this operation upon animals ; which having undergone a fermentative corruption, natural and not cadaverous, give forth, before the phlegm, spirits and volatile salts, which are a brandy of the kind ; and the true vital spirits, and others, after the phlegm, which are the tartar, or the fixed salt volatilised.

We may, in the same manner that we do vipers, prepare every other sort of animal, and extract from them the perfect essences, which would be entirely spirituous aliments, of an anticipated digestion, which should not only supply the weakness of the stomach, but spirit it with the other common aliments, to perform more usefully and perfectly the functions which old age or diseases forbid ; and it would be no mean support for the infirm and the aged ; because there is the same difference between these essences, and the flesh from which they are extracted, as we observe between the wine and the grape ; since, as we  
have



have shewn, these essences are properly a genuine animal wine, of the nature of our vital spirits.

In fine, it is only by an assiduous and uninterrupted labour, and upon these principles, that we can come to acquire such rare and precious treasures; as M. de Fontenelle extremely well observes, *'tis by imitating and counterfeiting nature, we sometimes procure her secrets.*

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A  
TREATISE  
ON  
VENEREAL MALADIES.

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PART SECOND.  
BOOK I.

*In which are explained, the several methods of treating the pox ; such as the way of extinction and salivation, and the other way of taking mercury internally, after the purification and reduction of it to a pure quintessence.*

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CHAP. I.

*Containing a very accurate explanation of the method of cure and treatment of the pox, in the way of extinction.*

**I**T is ever not only a piece of common justice, but of advantage too, to put in the best light possible the opinion we would oppose ; for we never better come to discover all



all the weakness thereof, than after we are made sensible of all its strength.

To that purpose I am going to make choice of the best authors who have treated of these matters ; I mean practised, the one the way of the extinction of the pocky venom, and the others the method of salivation. And to proceed in this with some order, and without prejudices, I shall lay open their true opinions and writings, viz. For the first method, those of M. Guifard <sup>a</sup> doctor of physick at Montpellier, and of M. Haquenot <sup>b</sup>, counsellor in the court of accompts, aids, and finances there, professor of physick in the university, and member of the royal society of sciences, a man of learning and uncommon knowledge, as may be seen from a discourse he pronounced on this subject in the assembly of the academy of Montpellier, on the 21<sup>st</sup> of January 1734, which I shall set forth, as it is a rare and very instructive piece, containing a new method ; which may, in some measure, be reckoned to strike a mean between the other two methods.

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<sup>a</sup> M. Guifard, doctor of physick in the university of Montpellier, has published a practical dissertation on venereal diseases, by way of a letter ; and gives us an instance, how wit and genius are capable of adorning every subject, and rendering it agreeable in the epistolary stile. He has besides published the method of curing wounds, which is likewise a very good performance.

<sup>b</sup> M. Haquenot has published several small works, preferable for their solidity to whole large volumes. To the beauty of his genius he has joined a course of consummate practice and experience. He is often sent for to the greatest cities of the kingdom, for the cure and relief of patients.

As to the second method, which is that of strong frictions and copious salivations, I shall make use of the writings and method of Dr. Astruc, whose very name alone is a compleat encomium; his reputation is universally known, and spread far and near; a reputation he has justly merited, from the number of his works, in the different branches of science, history, and polite literature.

The reasons which each advances for the establishing his method, will serve as so many arguments against those very methods themselves, which mutually contradict and destroy each other; which shews, that they have no infallible and certain method for the perfect and radical cure of this disease; that the cure can only be considered as palliative; that by its means they cannot promise themselves a renewal and perfect purification of the blood, which, notwithstanding, is the principal point; that they run their patients to the greatest hazards and extremities, which are almost ever followed by the most obstinate and fatal symptoms; that things brought to this pass, have made M. Chambau, first physician to Sobiesky king of Poland, to pronounce, in his practice of physick, this disease incurable. In a word, let us speak our mind freely; if the specifick for the cure of this malady be known, the manner of preparing and administering it is not. This is what I have already proved in the former part of this work, by teaching the ways to be observed and practised, in order



der to attain to the purification and preparation of this remedy. I have made no secret of it, being persuaded, in all respects, that men standing on their probity, their candour, and honour, should have no secrets of this nature; on the contrary, should shew their eagerness to discover them; too happy for them, if without examining from what quarter the good that is offered proceeds, we know how to avail ourselves, and make a good use of it: too happy, I say, if in doing justice to another, we could do it to ourselves, and stifle a set of prejudices, and a certain pride, which taints all our actions, and blinds our minds to that degree, that we imagine it impossible for any other but ourselves to be capable of doing service to the publick.

I sincerely and honestly declare, that it is not in the spirit of singularity, I have undertaken to communicate the new means of cure of the venereal disease, which I look upon as the scourge of the divine vengeance for the chastisement of mankind; neither is it in the view of having the idle pleasure of opposing the sentiments of others, or of assuming a superiority over them; very far from it; I know nothing so common and so general, and at the same time so humbling a consideration, as that inconstancy in opinions, which prevails in every man. For my particular, my sole view is to be serviceable to the publick; this is all the recompence I desire. In other respects, being an enemy to every thing

which has the air of dispute, and of minute and frivolous discussions, which I entirely give up, being persuaded that generally it answers no other end than that of irritating the minds of men, or embroiling the subject; I willingly submit to the decision of the judicious publick, to whose service I have for a long time devoted myself, by every degree of labour and painful toil. And now taking up my subject, let us give the hearing to the oracles of the method of extinction of the pocky virus. M. Guisard is the person first to speak.

#### L E T T E R VIII<sup>a</sup>.

In answer to the question regarding the manner of treating venereal diseases, containing a description of the method of their treatment at Montpellier.

S I R,

**M**Y design was not to stop there, but continues always in view, and the same. You shall be fully informed in every thing; purposing to make nothing a secret to you. Here follows, without any reserve, both the manner of treating the disease, and the most infallible means of guarding against every symptom.

Upon our assurance that the patient stands in need of the remedy, we begin to prepare him

<sup>a</sup> This letter is taken from the book of M. Guisard, a practical dissertation on venereal diseases, dedicated to M. de la Peyronie, consulting physician and first surgeon to the king, printed at Paris in 1743, p. 144.



him in a proper manner ; and I insist so much the more upon a nice observance of that preliminary preparation, as that therein even consists all the secret of a happy cure. In this intention I cause him to be blooded in the arm, and the day following I order a common purge, and the third I put him on the use of the bath.

If the patient be of a good constitution, and be judged capable to bear the bath with ease, he is to use it morning and evening. On coming out of the bath, I give him meat-broth, seasoned with cichory or borage ; sometimes the broth is made of a pullet only ; or barley pudding, pure milk, or milk and water, with a light decoction of barley, maiden-hair, or even with pure spring-water, according to the different intentions of nourishing, recruiting the strength, moistening, diluting, and tempering.

The number of baths is not always the same, there are some practitioners who only give ten or twelve ; I, for my part, order a score at least, every time a patient can bear it ; sometimes I order a greater number, in the case of a patient, who being of a dry temperament, requires a more extensive preparation. If a patient be fatigued with two baths a-day, I order no more than one, and for that reason to continue the longer in it.

After a course of the bath, the patient is blooded anew, and the next day purged ; and to calm the impressions of this second medi-

cine, a bath or two more, if you will, may be ordered.

Here a new regimen commences, and claims the greatest attention of the physician. The patient is discharged all use of meat, his drink to be a light ptisan of maiden-hair, or wild poppies; to which is added, if thought proper, a little sal prunel, or purified nitre, to make it diuretic; or if he should happen to dislike it, 'tis enough to dissolve a drachm of purified nitre in a pint of spring-water. The intention is to prepare the patient, and open at the same time a free passage for the mercury, which soon comes to mix and circulate with the blood.

Tho' the use of wine be commonly disallowed, there are cases in which it may, without restriction, be allowed, providing it be well diluted, and drank moderately; but above all when the patient is not heated; though it is still better to abstain from it entirely.

These things being well observed, the remedy is begun with a porringer of milk, which is given the patient an hour or two before he gets out of bed; he is to dine on a mess of porridge, with a couple of fresh eggs and a piece of bread, upon which he drinks two or three draughts of a ptisan. If he has taken his milk so very early, as not to be able to wait till dinner-time without taking something in the mean time, let him eat a piece of bread or a biscuit, to make him drink twice. The collation shall in like man-

ner



ner consist of a piece of bread or biscuit, and two glasses of ptisan; and at last he is to have a mess of porridge for supper, with some fresh eggs, as at dinner.

For the porridge at night, a cream of rice or barley in broth, milk or pure water is substituted; at bed-time a second porringer of milk, like that in the morning, is exhibited.

Tho' it be not customary to indulge the patient with meat, he may however be allowed a little; 'tis probably only the quantity which hurts, and should a patient be satisfied with little, there will be no harm in gratifying him. I have observed that the regimen, the particulars of which I have just now given, disgusts exceedingly; so many eggs become at length a very bad sort of nourishment, patients acquire a loathing for them, and in a few days complain of sour belchings, something resembling rotten eggs; and even commonly it happens, that the collection of these juices ill elaborated, produces swellings, which fatigue and tire out the patient in a surprising manner, and often cause a loss of appetite. And for these reasons it is I have resolved not to give eggs but at times; for instance, three or four times a week; but when persuaded of the moderation of a patient, and that I can depend upon his sobriety, I make no scruple of indulging him with a little boiled meat for dinner, and roasted for supper: but when all is said, meat, taken in moderation,

moderation, engenders no more corruption than eggs, which are eaten evening and morning for a month and a half running; and we should be under no apprehensions of being obliged to purge the patient in the one case more than in the other, before the remedy is finished.

The reason of ordering a light nourishment is, not only because the mercury would lose the facility of circulating with the blood, if the vessels were too replete, from an overabundant nourishment; but also, because it would endanger a patient a little over-fed, and discontinuing his ordinary course of exercise, to fall into some putrid fever or other.

The patient being duly prepared by bleedings, purges, and baths, what remain are the remedy, and the proper cautions to be observed therein. The unguent is commonly made with one-third part; that is, to one part of mercury, extinguished or killed with turpentine, are put two parts of hog's-lard, and the whole is beat in a marble mortar for thrice twenty-four hours, to the end the parts of the mercury may divide and mix exactly with the lard. Care is taken, before any thing is done, to examine the patient's mouth, and by that may be judged the changes which may afterwards happen, and which ought to be foreseen.

These things being attended to, and the cloth or flannel breeches and hose prepared, the patient is placed by the fire, unless the  
season



season be too hot, for there are circumstances when we cannot chuse our own time, nor put off from one season to another; and the boy who waits, having heated well his hands, moves them for some time on the part he is to anoint, in the intention of opening the texture of the skin.

After this, the physician, who conducts the cure, gives the quantity of the unguent, which he judges necessary for the proposed friction, which the boy spreads on all the part; and immediately after, pressing hard with the palms of both hands, begins to rub equally and uninterruptedly. And there is no further trouble needful about weighing the unguent, which each friction requires; the business being only to make the hand slip easy, and thereby we come to be assured that the dose is sufficient. The friction is finished in about a quarter of an hour; but to build on something more fixed and determinate, we continue rubbing till the part is dry, and the hands of the boy run no longer smooth upon the skin.

The number of frictions cannot be ascertained, considering the diversity of subjects, and the different bulk of the parts of the body. It is easy to see, that as there is much more unguent necessary to cover a large body than a smaller, so there is also a much greater quantity requisite, in any patient whatever, to cover the thigh than the leg. 'Tis not however entirely the bulk of the body which determines

determines the quantity of unguent, but rather the longer-standing of the disease, the more or less vigorous state of the patient, the nature of the symptoms, and the parts affected.

Tho' we may, without restriction, rub both the feet the first day, their bulk not exceeding that of the thigh, yet we will avoid doing it, if we consider that there are patients, in whom the first friction, how slight soever, have caused sometimes bad symptoms, which must be obviated.

This remark being made by the bye, the first friction shall extend from the sole of the foot inclusively, to four or five fingers breadth above the ankle. The second shall be made on the morrow, in the same manner, on the other foot, the distance of a day at least being observed between each. The third shall proceed from the place where the first has ended till under the knee, and the fourth shall follow the same order in the other: the fifth friction, beginning below the knee, shall ascend to about mid-thigh; and the sixth, on the opposite side, shall have the same extent.

The seventh and eighth frictions being the most considerable, it will not be improper, how inconsiderable soever the alteration in the mouth may happen to be, to stop for two days before you proceed any farther, and to observe the same interval between these. These two will take up the bulk of the thigh as high as the groin, and a little below the buttocks.



buttocks. The ninth may cover the two buttocks, the tenth go up as high as about the middle of the spine, and the eleventh to the nape of the neck. There still remain the two arms, for which the twelfth and thirteenth are allotted.

The true way of making the mercury pass or strain thro' the habit is, to continue rubbing the part for a long time, and to leave sticking on the skin a remainder of unguent, which could not have made its way through. The intention only is to give the mercurial parts time insensibly to detach themselves, and insinuate at last into the mass of humours.

'Tis in this intention that cloth breeches and hose are ordered, with a shirt for the purpose, which the patient quits not night nor day, till the end of the cure. 'Tis also with a view that none of the unguent be lost, we order the boy to wipe his hands, after each friction, with the patients sheets; and lastly, 'tis with the design that the habit of the skin be opened, that the patient is put to bed again, where he rests for an hour or two after friction.

Tho' the patient find himself then entirely anointed (only we never touch the abdomen and the breast) we may repeat some slight frictions on the parts we imagine to have been particularly affected. Very often we run over again as far as to the pubes, the perinæum, and about the buttocks, and come  
back

back to the parts where any remains of pain are continued to be felt. Not so much even as the exostoses, in case they are not inveterate, upon which new frictions are not successfully made. In this manner, if the patient be of an ordinary size, and no accident has befallen, there will be used about six, seven, or eight ounces of unguent. The time the patient continues in the sheets is as little determined as the number of frictions, or the quantity of unguent. In general, besides the time necessary to anoint a patient all over, he is to continue seven or eight days in the sheets after the last friction: On this footing we depend upon a quarantain of days; but the surest rule is, the disappearing of the symptoms.

The manner of terminating the cure is quite simple; since the business is only to bleed and purge the patient with his ordinary medicine; after which care is taken to clean him. It is proper to remark here, that tho' it may seem the danger is over, if, however, the season be unkindly, it will not be amiss to oblige the patient, for some days longer, to keep his room. The reason is plain, because he still has some remains of mercury about him, capable of causing great alterations, if care be not taken.

This is so true, that after the cure there has sometimes been observed to happen a copious salivation, and an universal bloatedness. And tho' this is not a frequent case, yet it is proper we be upon our guard; and we should  
suffer



suffer ourselves to be directed by every experience, and learn to obviate every emergency. Such, Sir, is the method we follow at Montpellier, the particulars of which I have just given you with all the exactness possible. But I am well apprised that this will not be thought sufficient, and that you doubtless expect I should say something further on the manner of treating the particular symptoms which are the ordinary attendants on the venereal disease; you are perfectly sensible I can refuse you nothing; but for this time you must allow me some respite, which I know you will readily agree to. I am,

S I R,

Yours, &c.

'Tis agreed that mercury is one of the most powerful remedies for the cure of venereal diseases; and physicians give out, that of all the methods of using it, that of rubbing the body with the mercurial unguent is the best, the surest, and only way to effect a radical cure.

This method of friction has for a long time been very fatal, when inconsiderately performed on the whole habit of the body; its effects were the plaintive groans of the patients, and this was all that was known of the matter. Heaven had reserved for two illustrious men of our day, the manner of remedying these disorders, or more properly, this desolation.

The

The first was the celebrated M. Barbeyrac, doctor of physick in the university of Montpellier, who could not bear that a remedy, which he looked upon as an infallible specific, should prove destructive to such numbers of patients, by the violent symptoms it almost ever produced; he was apprised that these symptoms were caused by the method of universal frictions then in practice; he imagined that, in order to put a stop to the violence of the mercury, it was necessary to suppress the use of these frictions, and substitute particular frictions in their room.

This physician was one of the greatest lights of physick; yet how rarely is it that men carry things at once to a certain point of perfection, we only come to it in some measure by gradual steps; he left many things imperfect and incorrect in his method, to render it the more salutary; as preparing the patients a longer time, interposing greater intervals between each friction, and causing them to use, in the course of these frictions, a milk-diet, and diluting ptisans, in order to deaden and blunt the action of the remedy: And it is to the learned M. Chicoyneau, first physician to the king, that we are indebted for these corrections, which are so many happy discoveries, which he published in the year 1718, in a thesis which was disputed in the schools of physick at Montpellier, in which he establishes, by solid reasons, and a set of observations which are very circumstantial,



stantial, that the principal intention, in the cure of the pox, should be the avoiding a salivation; that this sort of evacuation is more dangerous than useful, and that we ought to apply ourselves rather to extinguish than evacuate the venom. Nothing is a greater commendation both to the method and its author, than the opposition it met with, at first setting out, among men of the greatest parts and experience in this subject, who were afterwards forced to become its apologists, and to conform to the practice of this able physician.

Tho' this method, were it equally well practised as it was at first taught, be preferable to all the preceding methods, it labours under a good many inconveniences, from the changes and alterations made therein; inconveniences, of which the most considerable arise from the defect of purification and preparation of the mercury; but instead of attempting to remedy these inconveniences, by removing their cause, that is by purifying and preparing the mercury, things of a distant and remote consideration have been attempted.

I wave, for a moment, (purposing to treat of each in its place) a great number of inconveniences, most of which arise, from the manner of administering the remedy, either in the common practice, or in the aliment and the regimen prescribed the patient, and other things of that kind.

But there is another unavoidable inconvenience, which I cannot too early point at, arising from the nature and action of the mercury. How little skilled soever we are in the knowledge of this mineral, we must allow it to have integrant parts, highly unactive and lumpish, which, by their weight, shake and irritate the solids much, and break the humours; which is the reason that it is considered as a fusing, dissolving remedy, capable of inducing considerable alterations in the machine; and of this the heat, which it excites all over the body, the raising the pulse, and other effects it produces, are so many incontestable proofs. It is from this violent action of mercury, we must derive all the symptoms usually produced by frictions; and without mentioning here the very bad effects it anciently caused, in the way of universal frictions, not conducted with prudence, it is certain, what precautions soever be taken, that many patients cannot be guarded against grievous, and those very often mortal symptoms.

For instance, it has been experienced, in what manner soever you conduct the frictions, either with regard to the quantity of unguent, or the distance of time between each friction, the patients often fall into salivations, watchfulness, head-aches, cardialgia's, ulcers in the mouth, nausea's, vomitings, dysenteries, weakness, syncope's, and other symptoms, which are attended with fatal



consequences, and bring on death, if the patients be subject to tender lungs, or be of a bad habit of body.

The ablest and most sagacious physicians must own, that many patients, to whom frictions have been administered with all the circumspection and prudence possible, have not failed of becoming paralytick, and of losing the use of all their limbs, without a possibility of assigning any other cause than the excessive action of the mercury upon the brain and nerves; a thing unavoidable, especially if the salivation be provoked, either by the unskilfulness of the operator, or by the natural disposition of some patients to salivate with too much ease, who have always failed of a cure by this method. The reason assigned for it by the ablest physicians, and which is very just, is, that a copious salivation coming on after the first or second friction, obliges to suspend them; and that we cannot supply the blood with a sufficient quantity of mercury to destroy the venom, whose malignity has been only, so to speak, provoked to the combat, irritated, roused, and re-animated to heighten our ills, and bring on our destruction.

Far from undertaking the purification of the mercury, men obstinately continue to administer it, such as it comes out of the mine, ever abounding with impurities, as has been demonstrated; and the only care has been, to divert a salivation. Some have imagined to

interpose baths with the frictions, others purgatives. Such are the opinions and methods of M. Haguenot and Guifard, able physicians of Montpellier, they have put in practice the most delicate strokes of skill and art, to support and make their method prevail.

It is pretended we may avoid a salivation by the means of purgatives interposed with frictions, which are commonly used during the action of the remedy, in order to precipitate, according to them, the mercury; or, to speak more properly, derive the humours downwards, especially upon observing the least tendency to salivate, and it is found more commodious to use these medicines, than repeated bathings.

But is certain that this method by purgatives cannot be salutary, because the purgatives used, and of which we have several formula's, encrease the motion of the blood, dissipate its finest parts, reduce the patients to a state of desiccation, hinder the action of the mercury, by determining it towards the intestines, and by discharging it, which is contrary to the intention, which is to make it circulate or flow about with the blood. Besides these remedies, by diverting the evacuation of the salival glands towards those of the intestines, only cause an alteration in the course of the humours, without guarding the patients against the inconveniencies of a salivation, which consist, as is well known, in impoverishing the blood of its serosities, and depriving



depriving it of a part of a vehicle, which serves to keep up its circulation, and dilute the pocky concretions; which is the reason that this manner of avoiding a salivation often leaves the patients in a worse state than they were before entering upon a course of remedies.

In fine, it ever happens that these pungent remedies occasion colicks, obstinate fluxes, superpurgations, and other dangerous symptoms, which render this method highly suspected, and even prejudicial to the cure of the pox.

M. Haguénot, whom I would by no means deprive of the glory of having furnished me with a part of the objections for destroying the method of the interposition of purgatives with the frictions, to avoid a salivation, endeavours to establish his method upon the ruins of others, and pretends that it is not so with bathing, which, far from producing the bad effects of purgatives, prevents even all those, which the too violent action of the mercury might produce; since by means of the particles of water, which it throws plentifully into the body by the absorbing conduits of the skin, it relaxes the solids, dilutes the lymph and pocky concretions, facilitates the circulation and mixture of the mercury with the concretions remaining in the blood, tempers the too great heat, supplies the loss which is sustained by insensible perspiration, and thereby maintains the flexibility of the vessels, and fluidity of the humours.

Truth should prevail over every other consideration: it were to be wished, that the effects answered the promising expectations; that is, that the interposition of bathing with frictions could controul the action of the mercury, put a stop to its great violence, prevent salivation, and procure a radical cure, not only of the pox, as is pretended, but of all other venereal symptoms too; as shankers<sup>a</sup>, bubo's<sup>b</sup>, venereal wens<sup>c</sup>, condyloma's, exostoses<sup>d</sup>, tetters<sup>e</sup>, and other species of particular

<sup>a</sup> Shankers, or cancers; little malignant ulcers, whose lips are callous, which discharge a ferous pus, of a yellowish, greenish, or greyish cast, and are surrounded with small tumefied obstructed blood-vessels, resembling the claws of a little crab, whence it has taken its name cancer. Shankers are distinguished into simple, scorbutic and pocky. The simple arise in the mouth, and differ not from the aphthæ. The scorbutick fall also upon the mouth, in particular the gums. The venereal or pocky arise in the natural parts. Besides the appellation of shankers, they have also that of a *caries* of the *pudenda*.

<sup>b</sup> A bubo is a phlegmonic tumour, hard and oval, which commonly comes slowly to suppuration; its seat is in the conglomerated glands of the pubes, sometimes in those of the armpits. It is caused by a pocky virus. It comes to be as large as a pigeon or pullet's egg. We shall speak of it in its place, and give a fuller explanation of it.

<sup>c</sup> Venereal wens, called porreaux, are round wens or warts, which have a head like that of the small leek, and stick to the skin by small fibres, resembling the fibres of the root of this plant, which is the reason they are particularly called porreaux, there being several kinds of warts.

<sup>d</sup> Exostoses, preternatural bony tumours, which arise upon the surface of the bone. This sort of tumour takes up sometimes its whole length, which is common in the rachitis, in which often the whole substance of the bone is tumefied. The pocky and the scorbutick are very subject to exostoses. In the king's-evil and the gout, they commonly seize on the apophyses, the tarsus, the carpus, the joints of the fingers, and the other articulations of the extremities.

<sup>e</sup> Tetters, is an erisipelatous tumour, less ruddy than the erisipeles, accompanied with small pustules, which gnaw and



ticular pox; but unhappily the experiments answer not expectation.

On the contrary, bathing, which is good and highly salutary for preparing the patient, is highly pernicious and detrimental in the course of the treatment, and administration of other remedies. Besides, 'tis known that few persons are capable of going through a certain course of bathing, and the almost ever unavoidable accidents they bring along with them, as fatal, not only as the bleedings and purgatives which are used in the other method to prevent salivation, but as salivation itself. Reason, experience, and the opinion of Boerhaave, entirely overthrow this method.

We will afterwards shew the use bathing should be put to, and the manner how; its good and its bad effects, in order to be able to put in practice the one, and avoid the other.

Having related, as exactly as we have done, the method for the cure of venereal diseases by the way of extinction, a method which is pretended, as I have shewn, to have been corrected and carried to its highest degree of perfection, by the means of bathing, and by

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eat the skin, and render it rough and unequal. It is distinguished into two sorts, the simple and the live; the simple is called herpes, or miliary tetter, herpes miliaris, herpes cenchrias; it is farinaceous or crustaceous. The live tetter, herpes ferus, papula fera, *ἑσθιομενη*, is corroding and spreading, or malignant and cancerous. Tettters are sometimes symptomatic, and take their appellation from the principal disease; such are the scorbutic and pocky.

a total suppression of salivation. Let us now, with the same exactness, relate the method for the cure of this same disease, by the way of strong frictions and copious salivations.

Some ill-natured critick will probably tell us; We, your readers, are no strangers to these methods; you can lay claim to no greater a character than that of a weak and mean compiler, and consequently you give us nothing new. To this I answer, so far it is true, I give nothing new. That, however, we may draw a great advantage, and gather much profit from the exposition I have made of both these methods, and even to conclude, that every kingdom divided against itself shall be brought to ruin, and not be able to stand; that considering the great number of opinions and sentiments, the changes and contradictions in these two methods, we must rest in another method, which may be without these capital defects; and that what I propose ought, for its goodness and simplicity, to fix and determine us; that it is the only one, when conducted by an able physician and surgeon, from which we can expect a happy success and a perfect cure; it is this we will establish more particularly in the sequel of this work, after having compleated the whole extent of its plan; that is, after having given an account of the method of frictions, and discovered all its hazard.

As I have made it a rule to myself, to set forth these methods to the greatest advantage,  
that



that it may not with any just colour be objected, that it is through jealousy, conceit, or other bad motive, I disguise the truth, and would establish my own method to the prejudice of others by such means; I declare, that truth is what I seek for; all I ask, is a fair examination; and I am even hopeful that the disinterested, both among physicians and surgeons, will do it without prejudice, and without partiality; and in examining both these methods, I beg that, even without paying any regard to my reasons, my observations, and experiences, they would deign to give themselves the trouble to try my method, to be convinced of its truth. Happy for me could I excite the emulation of those of the profession, who have the same views with myself, and that we all concurred to promote the advantage of the publick.

After this slight digression, which I thought needful, let us hear the plea of those who stand up for, and practise the method of, strong frictions and copious salivations.

We confine ourselves to examine the writings of M. Astruc; that great physician has brought together every thing that can with advantage be said on the subject, all which he sets off with an admirable eloquence. What pity is it, that so sublime a genius has undertaken the patronage of so bad a cause! In the character of another Hercules, in all his terrors, overturning every opposition by his reasonings, his syllogisms, and antitheses,  
 &c.

&c. explaining and expressing himself, and deciding, with the absolute air of a master genius; but a woman was able to put a stop to the progress, to the rapid and glorious course of the victories of this hero. Considering myself, in comparison with M. Astruc, as a dwarf, a pigmy, I however venture to tell him, with all the mildness, deference, and even respect, due to his eminent learning, that his method is extremely bad, pernicious, and detrimental; that if, on occasion of some atheists and fanatics, it has been said, that the devil has had his martyrs too, we may say the pox have had theirs, through the tortures and sufferings, and often death itself, which this inhuman method, by strong frictions and copious salivations, brings along with it, and through the obstinate conceit of chusing to treat this distemper by this method. We venture to tell him, that he grossly deceives himself to imagine, that, in order to the cure of venereal diseases, strong frictions and copious salivations are necessary. And that he still continues to deceive himself, to imagine that this disease took its rise and date at the siege of Naples, under the reign of Charles VIII. To persist in that opinion, shews our ignorance of the nature of the disease. In fine, that he deceives himself to imagine this distemper to be on the decline, on the point of ceasing, disappearing, and coming to a period. A pleasing prediction this, indeed; he announces the golden age



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age to the world, a total reformation of manners: For, in spite of this oracle, it is but too true, as a celebrated divine, after St. Paul, speaks, that impurity, as the most contagious, most obstinate and shameful of vices, is more afflictive than all the others put together, being, both to soul and to body, a genuine plague and a torture.

### C H A P. II.

*Containing the method of frictions and salivations, as practised by M. Astruc.*

#### A R T. I.

1.<sup>a</sup> We ought to chuse a good and pure mercury, free from all mixture, if possible, revived from cinnabar, in order to divide, with more ease, into molecules of an extreme smallness.

2.<sup>b</sup> To extinguish or kill the mercury in a brass mortar with spittle, or at most with a few drops of turpentine, to the end that the parts, which are less entangled, may more readily resume their first form.

3.

<sup>a</sup> The necessity of having a pure mercury, is a thing every one owns; but we ought not to flatter ourselves that what we use is such. It is no wise impossible to have mercury revived from cinnabar, nothing is so easy, but at the same time nothing so useful, as employing purified mercury in the manner we have taught.

<sup>b</sup> People are sensible of the inconveniencies of this practise, being subject to an infected spittle, which entering into the body, by the aid of the mercury, comes to be strained with the blood.

3.<sup>c</sup> To mix the mercury with hog's-lard which is fresh and insipid, not sharp and rusty, for fear it should burn the skin, as sometimes is the case, or raise at the roots of the hair itching pimples.

4. To set the mercurial unguent before a clear fire, and previously to make dry frictions upon the part till it turns ruddy, to the end the pores may be the more opened, and receive more of the mercury.

5. To spread and apply the unguent in rubbing, and not daub the body over with a pencil, and for that end to make use of an unguent, a little thick instead of thin, for the particles of the mercury, quickened by the motion and heat of the rubbing, to penetrate the deeper.

6. To continue each friction, till the unguent appear to dry on the part of the skin you rub, and flow with difficulty under the hand of the operator.

7. Not to allow the patient to rub himself, as some would have, but by persons fit for this service, who will rub more strongly, and for a longer time, and to make them do it with the naked hand, and without gloves, in order to cause a greater degree of heat; tho' the operator run the risk of a salivation himself, if he performs in one and the same day on a number of patients.

8.

<sup>c</sup> Is it possible to be sensible of inconveniencies, and not endeavour to avoid them! generally the lard of a leprous hog is made use of, the leprosy being a distemper with which these animals are almost all of them infected.



8. To cover the rubbed part, to prevent the wiping off of the unguent; to put the patient, at the end of each friction, into a warm bed, where he is to continue for an hour, or half an hour, for the heat to cause the mercury to penetrate the better.

The dose for the frictions is commonly from two to three drams; and we should use about five or six ounces of mercury, and sometimes more.

The frictions should be preceded by bleedings, purges, diluting apozems, bathing, and sometimes by the use of the mineral waters.

As to the salivations, it is but justice to relate what M. Astruc says of them, in pursuance of his method, in the softest manner, and consequently with the appearance of the least danger, provided we are certain that a sufficient quantity of mercury has entered the body, salivation is not absolutely necessary to destroy the pox; yet salivation is the surest and easiest way to discharge the greatest part of the virus lying concealed in the blood; and therefore coming to fail, it must be supplied by other evacuations, either natural, as sweat and urine; or artificial, as by stool, to procure an exit to the venom.

<sup>d</sup> Besides, the salivation is an assured rule to judge, both of the quantity of the mercury which is gone into the body, and its action  
upon

<sup>d</sup> A very uncertain rule. The best rule whereby to judge of the effect of the remedy, is to examine whether the patient be better, and the causes of the distemper cease; whether the symptoms are cured and removed.

upon the blood, and consequently to know how, with more certainty, to conduct the cure, according to the nature and standing of the disease.

<sup>e</sup> Besides, salivation appears to be necessary to give the virus an outlet, either to inform the physician in what he has done, or what remains to be done, to the end he may not combat the distemper in the dark, and without rule to direct him.

<sup>f</sup> Salivation is chiefly necessary, when the pox is of an old standing, and inveterate; when the venom has taken deep root; and when it has occupy'd a great many places; for in that case the remedy should be proportioned to the greatness of the malady, which is to be rooted out and destroyed.

<sup>g</sup> However, salivation must always be conducted with prudence, and, if there be occasion, moderated by purgatives; so that the  
ulcers

<sup>e</sup> This way, on the contrary, is violent and out of the common course; whereas that by sweat and insensible perspiration is natural, and always the usual method of nature herself.

<sup>f</sup> An abuse of principles, a false application of maxims, and vague reasonings; a distemper can never be supposed to be destroyed by encreasing it; the more a patient is over-whelmed by his load of disease, the less occasion there is to torture him.

<sup>g</sup> Truth has almighty force; it obliges this author to retract and overthrow all he has said in favour of salivations: "For," says he, to what purpose is it to waste and exhaust, without any discretion, poor patients, by teasing, watchings, and the tortures of a cruel, intolerable, and always hazardous salivation; if in sparing them all these evils, they may be cured with equal certainty." Hold there, and I will admire you as a very great physician; but do not persist in saying, that the patient should discharge, by the mouth, at least two pounds of saliva a day. Where is the necessity of this salivation  
tion



ulcers of the mouth be not numerous nor deep, and that the patient discharge each day no more than one or two pounds of saliva: for to what purpose is it ('tis M. Astruc who still speaks) to torment, waste, and exhaust, without any discretion, poor patients, by teasing, watchings, and the tortures of a cruel, intolerable, and always hazardous salivation, if, by sparing them all these evils, they may be cured with equal certainty.

We must even avoid salivations, by administering frictions in small doses, and at intervals; or if the salivation come on, we must stop it by purgatives; when the patient is threaten'd with the pthyfick, or subject to the epilepsy; when the gums are threatened with the scurvy; when the throat, and the neighbouring parts, are full of scrophulous tumors; when a woman is with child; and when the weakness of the patient puts him out of a condition to go through with a salivation, &c.

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tion, since you acknowledge, that the cure can be performed without it; and since you say, that it is fatal to persons troubled with the pthyfick, epilepsy, scurvy, and king's-evil, and to women with child? Should an author of less reputation and authority than the person whose method I have pitched upon, by way of preference, as being the chief, be guilty of such deviations, and give into such contradictions, people would take no notice, looking upon all his errors as being of no consequence: but in so celebrated an author as M. Astruc, every thing becomes of importance; wherefore we beg of him to be consistent with himself, and to suppress and discard salivations for ever. And if it be true, as I believe it is, that he cured that Spaniard who was given over by the physicians at Barcelona and Montpellier; and the young man, who had been before under the care of Dr. Boerhaave; the success was only owing to his using no salivations, as he himself says.

I could, so to say, bear down this method of salivations with a crowd of authorities; and to make the horror of it appear, show that it is contrary to the practice of the ablest physicians of our days; and with an air of vanity and triumph, make a great number of quotations, but I chuse rather to remit M. Astruc to his own breast, his own great knowledge and probity; he perceives the truth, and there is room to hope that he will put it in practice; for I owe him too much justice to believe, that he is like those who, though they know the truth, yet make it to depend upon their prejudices, and on whatever they have once resolved to follow.

What fatal and irreparable effects does not salivation produce? the mouth all inflamed, full of erysipelatous ulcers, galling pustules, and little ulcers full of a whitish and stinking matter at the bottom; whence arises a flood of saliva and slimy slaver, like the white of an egg, which brings after it the most cruel pains and tortures, and the most fatal symptoms; the head swells very much, the patient is all over bloated and disfigured, his teeth loosened, his tongue swelled up, so that he is stifled and cannot breathe. To this I add, what ought to have opened the eyes of the partisans of this method, which is contrary to the end that they propose, and that is, in proportion as the salivation encreases, not only all the secretions are diminished and totally suppressed, but likewise the urine and perspi-



perspiration, which are known to be the surest and happiest ways for driving out the pocky venom, and all the other bad humours.

A R T. II.

The apologist for the method of salivations and frictions, after a good many efforts to establish the superiority of this method above all others, throws himself into a declamation that is idle enough, and even mistimed, by a particular, and in some measure, favourite, observation, which he has taken care to put in distinguished characters, in order to render it the more remarkable. “It appears, says he, clearly, that mercury never produces its effects better, than when its imperceptible particles have insinuated themselves into the vessels that are slightly embarrassed with a little fat, and by that means rendered capable of reducing themselves, without any difficulty, into very subtile and perfectly round globules, which freely circulate thro’ the blood like a fine dew.” He goes on ; and here it is that he plays off the chemists, and means to turn them into ridicule. I leave the chemical gentlemen to examine why they torment, to no purpose, the molecules of mercury by so many tortures, solutions, calcinations, precipitations, sublimations, &c. why they clog them with so many sulphurous particles in their preparations of cinnabar ; why they impregnate and arm them with so many caustick and noxious salts in their precipitates and sublimates : in a word,

M

why

why they unite mercury with so many acrid calces, and metals in their precipitates of *venus solaris*, and some others, with an intention to make the mercurial particles lose their natural force, upon which depends the whole virtue of the remedy, and which is the peculiar, not to say, the only cause of the effects of mercury. The truth is ('tis still M. Astruc who speaks) that by this means, if drugs are not composed which approach near to poison, a thing very much to be feared; at least the remedies are made a great deal less efficacious for the cure of the pox, seeing these sorts of additions are as so many obstacles to the natural efficacy of the mercurial particles.

What we have just now related, is spirited and pretty! there is room to believe that this author has not given scope to his imagination, but in order to have occasion to enliven the subject from the grave air of reasonings!

But irony apart: the objections and declamations that have been made, are no more than a phantom, which he has formed in order to have the pleasure of combating it. There is reason to condemn certain mercurial preparations, particularly those we have just mentioned, because they are bad, almost as much as his method: but it is a little too hard to strike in general at all the chemists and their preparations. Our author, a great physician, and who consequently should be a good chemist himself, a necessary and indispensable qualification, as we have shewn



shewn already, ought to put his own hand to the work, and correct what he found amiss in these preparations, which he justly condemns; we should believe, that by the excellence of his genius, he would have given us something rare and valuable, namely, the true specifick for the cure of venereal diseases, had not he unluckily confined himself to simple reasonings, which undoubtedly ought to give way to experience!

Upon this principle we defy him to say any thing reasonable against the mercurial preparations which I have given, for I have room to hope, as well from his knowledge, as from his sincerity, that he will agree that these preparations are free from the reproaches and faults with which those he mentions in his remark are charged, and divested of all acid and acrid salts. In a word, he will find the mercury reduced into a ponderous water, into spirits and pure quintessence; he is too good a physician, not to know what the founder part maintain, that all the molecules of fluid bodies, and even of water, are round and spherical; that consequently these preparations contain, in an eminent degree of perfection, all the virtues and qualities which he ascribes to mercury, administered by way of friction; it will be found that this mixt is truly purified, and that in this state it has not only the desired qualities, but that it contains internally in its substance, homogeneous to our natures, the necessary virtues for utterly

extirpating the pocky venom, and for renewing the mass of blood.

In vain would people attack my preparations, under the pretext of their containing mixtures, and acid, acrid, and pungent salts, and that consequently they are corrosive and noxious.

These reproaches would be very ill grounded, as they would be contrary to truth; for,  
1. There will be found no mixture of any kind of acid, acrid, and pungent salts. It is an easy matter to be convinced of this, by an examination and analysis of my preparations.  
2. If I have made use of salts and acid liquors, in order to arrive at the solution of my mercury, it is only as necessary agents that I have done so, in order to open, work, and purify it; but these agents have not remained in my preparations; I have taken them out. It is an easy matter to be still more convinced of this important truth, by means of an examination and analysis of the preparations.

Suffer me to make use of a very simple comparison, in order to render the matter obvious and past all doubt upon this head. We use every day, for instance, a knife to pare an apple, we throw away the skin, and whatever else is not proper to eat, and then we lay by the knife: What harm has it done, or can it possibly do us, in eating this apple? none at all; though it be a very dangerous weapon in the hands of a fool. Once more; there is no reasonable pretext for any demur,  
there



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there are no acid, nor any other dangerous mixtures; if I have made use of the one and the other, it is like the above-mentioned knife; I have taken them quite out, there does not remain even the idea or least vestige of them.

It is astonishing that people should dread the use of mercury purified, digested, and prepared philosophically, and not be afraid to administer it impure and crude, charged with extraneous recrements, always hazardous, always noxious to our natures, because they are contrary thereto: for besides the reasons of preference, which we have shewn throughout the whole course of our work, in favour of the mercury which by our method is to enter into the human body, above that of frictions; it should suffice to consider, that we give only from five to six drops of the water of mercury, whereas by frictions, two, three, and four drams, at a time, are introduced into the body, that never fails (notwithstanding what they alledge) to reunite again in the body. If there be some damage to be apprehended in the use of mercury, as may be judged from the above comparison alone, on which side is the greatest danger, or rather is there not always danger, and very often fatal accidents, attending the common method of frictions. There never happens any in that which we propose; not only on account of our preparations, which sweeten, purify, and divest the mercury of all its malignant qualities; but likewise on account of

the very small quantity which we make to enter into the body, namely, a small quantity of a very great virtue, and of a marvellous and infallible efficacy.

If M. Astruc himself would condescend to give some attention to my mercurial preparations and my method, I flatter myself that, raised as he is above the vulgar by his rare merit, far from censuring mercurial preparations, he would become a zealous advocate for them. To fall into, and to continue in an error, is a pretty common thing amongst the vulgar; but to acknowledge and confess one's error, is to surpass other men, and to deserve the name of a wise man.

In fact, it seems to me the shortest, the most certain, and the most direct road to arrive at the discovery of truth, to observe some moderation in one's sentiments, and some modesty in one's discourse; never to maintain any opinion, how probable soever, with prepossession and obstinacy; to be always ready to hear the objections and reasons of others, and even to adhere to them, and change opinion, if it be necessary.

However we have still a good many high storms of this author to weather through; but before we come to hear the thunder-crack, let us fortify ourselves with courage and patience: after that, we will enter into some detail, and endeavour to shew, that our opinion and method of curing venereal diseases, by way of mercurial preparations taken internally,



internally, is founded upon the judgment and authority of the greatest masters of the art.

A R T. III.

I prefer brevity to the pleasure and advantage I might have of following M. Astruc step by step, since in going along, I might make him more and more sensible of his error, in believing that the method of friction is the only and the best method that is in use for the cure of venereal diseases. Moreover, it is certain that the contradictions and instability of the method and reasonings which this author uses, are sufficient to show how little solidity they have. It is a common fault, into which those fall who embrace an erroneous opinion; truth never loses its rights, it shines through the veil with which people want to cover it, with an intent to favour and gain credit to their opinion: but all these shifts become useless; that very truth can never be extinguished; it shines and shows itself more illustrious, after it has dispersed the clouds. The great variety that abounds in M. Astruc's writings, and the concessions which he makes, are a striking instance of what I have just said.

In fact, we need only attend to the writings of this celebrated physician, and we shall see to arise, from time to time, in some sort, vapours, tempests, storms, lightening, and thunder, which seem as if they would overturn every thing; he admits of no other

opinion but his own, though that of others be grounded upon reason, which he pretends should be of no weight in physick, when it stands alone. Let us hear this author, 'tis he who is going to make a terrible noise; and he alone is capable of doing it in such strong and emphatick terms as the following, B. 2. ch. 12. p. 255. “ Let then these impostors  
 “ be gone, who, with their panacæa's, pre-  
 “ cipitates, magisteries, pills, powders, elixirs,  
 “ secrets, and mercurial tinctures, dare pro-  
 “ mise a radical cure of a confirmed pox.  
 “ Let them at length forbear dishonouring  
 “ physick, and rendering it odious, through  
 “ the abominable abuse which they make of  
 “ excellent remedies, which being well ap-  
 “ plied, have restored, and will still restore,  
 “ health to a great many people.”

After all this ado, it seems that there is no agreement, truce, reconciliation, nor peace to be expected; however the storm ceases, lucid intervals succeed, and the tempest is blown over; let us resume courage: “ One may  
 “ see by this (it is still our author that  
 “ speaks) that I do not pretend to con-  
 “ demn, in any shape, the internal use of  
 “ mercurial preparations; on the contrary, I  
 “ reckon them very useful, provided they be  
 “ employ'd in those maladies where they are  
 “ proper, and with the method convenient  
 “ for venereal, just beginning and local, ma-  
 “ ladies, as the gonorrhœa, bubo's, shankers,  
 “ verruca's, &c. because one has grounds to  
 “ hope,



“ hope, that by such remedies a venom,  
 “ which is but in small quantity, and but  
 “ newly communicated, may be rooted out.”

This is not all, our author makes us a great many more concessions, without any need of calling a congress; there is however room to believe, that it is by the mediation of the most able physicians, among others Dr. Boerhaave and Dr. Mead, who are very far from being altogether of his opinion: I mention these alone, that I may not over-burden, like him, this work with an idle list of names, and because he justly gives them the highest praises, as being lovers of truth. In a word, he is obliged to agree in two essential points.

The first is, that by the way of friction and salivation, we cannot hope to cure every sort of pox.

The second point is, that these cures are reserved to mercury taken inwardly, and to guijac.

It will hardly be believed, that such concessions should have escaped this author; but such is the force of truth, that it shews itself in spite of us, what shifts and precautions soever we may take to conceal it. Our prejudices impose upon us for a time, but sooner or later we are obliged to submit to truth. In order to convince us of this, I am going to transcribe faithfully, and word for word, what this author says.

“ All the liquors having recovered their  
 “ fluidity by means of mercury administered  
 “ by

“ by way of friction, the vessels, pores, and  
“ excretory ducts being opened, the oscilla-  
“ tion of the fibres encreased, the circula-  
“ tion of the humours accelerated, and the  
“ pocky venom destroyed and rooted out ;  
“ that is to say, the antecedent, concomi-  
“ tant, and efficient causes of the malady be-  
“ ing destroyed, the humours will no longer  
“ stagnate in the parts, and consequently  
“ rheumatick and gouty pains will be quite  
“ removed. The humours that are contrary  
“ to nature, not only those of the soft parts,  
“ but likewise of the bony parts, will be re-  
“ solved, such as ganglions, nodus’s, viscous  
“ tumours, meliceres, atheroma’s, steatoma’s,  
“ schirrus’s, exostoses, and hyperostoses, ero-  
“ sions, and ulcers of the parts, will be cu-  
“ red ; as also the different sorts of tetters,  
“ pustules, ulcers, and the caries : in fine,  
“ all the symptoms of the pox will disappear  
“ in a little time.

“ Moreover, what we say of the effect of  
“ mercury, should be taken with some grains  
“ of allowance ; (it is still our author that  
“ speaks) for the action of the mercurial glo-  
“ bules upon the blood, the vessels and the  
“ obstacles which they meet with in their  
“ way, being limited, it must also have a li-  
“ mited effect. Thus the mercury may quite  
“ carry off obstructions, dissipate gross hu-  
“ mours, and discuss tumours, when the  
“ matter which forms them is still soft and  
“ capable of yielding ; but the same success  
“ ought



“ ought not to be expected when it is too  
 “ hard and compact; whence it happens,  
 “ that inveterate and obstinate ganglions, no-  
 “ dus’s, schirrhus’s, exostoses, and hyperos-  
 “ toses, sometimes continue after mercurial  
 “ frictions well administered, tho’ the pocky  
 “ venom be entirely destroyed.” All this has  
 very much the air of a paradox; does it not  
 carry with it some degree of complaisance,  
 were it only that, in favour of justice? our  
 author yields to gayac, at the expence of  
 mercury administered by way of friction; for

1. He agrees that the decoction of guijac,  
 as likewise the decoction of china-root, fassa-  
 parilla, sassafras, &c. are serviceable in vene-  
 real maladies, when just beginning and local,  
 as in a gonorrhœa, bubo’s, shankers, and ver-  
 ruca’s, in which the morbid venom that  
 is but in small quantity, may commonly be  
 extirpated by a decoction of the woods; yet  
 we must be cautious not to use it rashly on  
 lean, dry, pale, and bilious patients, or on  
 such as already have their lungs, kidneys, or  
 bladder, affected with any disorder.

2. That this decoction used with the same  
 precaution, is very serviceable in rooting out  
 the pocky pains that may remain after mer-  
 curial frictions, whether it be prescribed alone,  
 or given cut among cow’s milk, according as  
 the temperament of the patient is more moist  
 or dry, more ferous or saline.

3. And lastly, that it is sometimes neces-  
 sary after frictions duly administered, when  
 the

the pox is complicated with the king's-evil or scurvy, in such a manner, that the symptoms depend on these two causes; for mercury, which powerfully destroys the pocky venom, for the most part makes no impression on the scrophulous or scorbutick venom; whereas they both happily yield to the decoction of guijac. And therefore I have seen pocky patients attacked at the same time with the scurvy and the king's-evil, who could not recover, notwithstanding frictions duly administered, a perfect state of health, till after they had used, for a month together, a decoction of guijac alone, or mixed with other woods, and certain antiscrophulous or antiscorbutick herbs.

The thing that might have given occasion to M. Astruc's making the concessions which seem entirely to destroy his opinion and method, or that which at least has obliged him in some measure to recant, after what he has said in so high a strain about the powerful effects of mercury administered by way of friction, is probably owing to the observations made by M. Boerhaave on the unefficacy of mercury, administered by way of friction, or perhaps owing to his own proper experience. M. Boerhaave<sup>a</sup> gives an account of a patient who had been given over by the physicians, whose medicines had proved unsuccessful, as well as mercurial frictions,

<sup>a</sup> See this author's preface to his edition of Aloysius Lufinus, printed at Leyden, anno 1728.



tions, was nevertheless perfectly cured by using a decoction of guijac. M. Boerhaave goes on, and believes that mercury being put into motion by the vital force alone, cures certain venereal maladies, by driving out, when thus excited, the pocky venom: wherefore it has no efficacy, when this venom is fixed in places out of the reach of the action of the heart and arteries; whence it happens that mercury administered by way of frictions, does not cure the caries of the diploe, but spreads in the bony cellules, that are void of marrow, and there remains fixed. Hence it likewise happens, that when the venom infects the marrow of the bones, the mercury does not carry it off but with a great deal of difficulty. And as to gonorrhœa's, that are only in the cellular texture of the penis, a place where the circulation of the humours is scarce perceptible, mercury never cures them, whilst at the same time it entirely destroys the predominant pox: moreover it cannot hinder the shedding of the small bones, which are only covered with very fine simple membranes; but it can cure the venereal diseases that are seated in places where there are arteries of blood, serum, or lymph, and other vessels, in which the circulation of the fluids is performed with a convenient velocity, and which can receive the mercury into their cavities, and strongly propel it by means of their contraction.

M. Astruc agrees exactly with M. Boerhaave; he differs but little from his principles, and believes, according to his own, that the pox, of which M. Boerhaave speaks, upon which mercurial frictions had no effect, and which nevertheless was cured by a decoction of guijac, was scrophulous; and that consequently it could not any wise affect the method of frictions, nor prove the unsufficiency of mercury for destroying the pox according to that very method; but only its unsufficiency for curing the king's-evil, and a scrophulous cachexy.

I leave the judicious world to determine the case, and the question agitated between these two famous authors; and I will draw no other advantage from it, than that of shewing evidently, that the greatest partisans for the method of frictions, are forced to agree,

1. That this method is insufficient to cure all sorts of pox, particularly the scrophulous sort, a scrophulous and scorbutick cachexy, gonorrhœa's, bubo's, shankers, tetters, the caries of the bones, &c. in short, all the particular sorts of pox.

2. That there are very few pox that are not complicated with these maladies, and these symptoms; seeing that in some measure the seat of the king's-evil is in the lymph, as we shall more accurately confirm in what follows, when we come to treat of this malady.

3. Lastly, that it is not to the purpose, that these advocates for mercurial frictions, should  
give



give no other virtue, no other quality to mercury, than its weight, divisibility, mobility, and its round and spherical figure; pretended virtues, that to me seem very equivocal and very unsufficient to perform, without some other assistance, the radical cure of that cruel malady; the principal virtue which, according to them, is its great weight, is rather hurtful than serviceable; it oppresses the bowels, which are too soft and too weak to resist it, and by the violence of its motion, it may easily burst (a thing that too often happens) the too much distended coats of the vessels. We have shewn above in this treatise, all that is justly to be apprehended from mercury, administered as is done to this day, either by way of friction, or internally, without purification and due preparation, grossly, without art and skill; and we may truly say, that if the specifick remedy for the cure of venereal diseases has been known, people did not know how to prepare or administer it. Thus in order to avoid prolixity and repetitions, we remit the reader to what we have said of this mixt, and to the preparations, and salutary and specifick remedies which we have given of it, whose excellence we are going to shew more and more, by the application we are about to make of it, in giving a plain account of our method for the cure of venereal maladies, that will contain the manner of administering it with success, for the cure of all venereal diseases, either simply beginning,

locally

locally complicated, scrophulous and scorbutick ; and, in general, of what sort and nature soever they be.

## C H A P. III.

*Containing the author's method for the cure and treatment of the pox, and the administering the remedies and preparations previous thereto.*

I Am not of the same opinion with those who believe that preparations, previous to the treatment of venereal diseases, are useless and even noxious, under pretext that these preparations weaken the patients. M. Astruc has very well established the contrary, and it would be a vain attempt to add any thing better: I therefore will say, that the preparations absolutely depend on the real state of the patient, either with regard to the principal malady, or with regard to the accidental maladies, with which the pox is almost always observed to be complicated ; and that consequently one should be thoroughly sensible of the necessity there is of making choice of a good physician for the conduct, treatment, and administering of remedies, in order to draw a sure diagnostick, and to act and proceed accordingly ; since on this knowledge of the treatment and application of remedies, I in some measure make to depend the good success of a radical cure ; for it is not sufficient to have a good remedy, if one does not know how to administer it properly,



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properly, according to art, the nature of the case, and its peculiar circumstances.

From what we have just observed, there arises a consequence which is no less important, and which, I know not by what fatality it happens, is not sufficiently attended to. It seems that people are enemies to themselves, and renounce the light of right reason; we are very sensible that it is necessary to make choice of a good physician; yet for all that, the greatest part of mankind trust and give themselves entirely up to persons possessed of pretended secrets, who thrust themselves into the treatment of these maladies; the greatest part of whom, without principles, knowledge, skill, probity, authority, or power, run from house to house, administer remedies that do more hurt than good, augment and cause new maladies, which it is very difficult, not to say impossible, for the ablest physician and the best remedies, afterwards to cure. We cannot be too cautious, nor too much exasperated against such persons, real quacks and publick pests, who are not only a discredit to physick, but likewise strike at the very laws of civil society.

What we have just now said, shows two things equally useful to be observed; the first is, the indispensable necessity of preparations previous to the administering topical remedies for the cure and treatment of venereal maladies; the second is, the importance of making choice of an able physician to determine those

preparations, and put them in practice; because, regularly, these ought to be distinct and different, according to the several causes of maladies, and their respective symptoms.

Admitting these principles, we cannot lay down very exact rules at present, without entering into a circumstantial detail of all the sorts of maladies and pox, not only complicated and simple, but peculiar: so that in this respect, not to run into confusion, we reserve explaining what these preparations ought to be, separately and distinctly, till we shall come to treat of each of these parts in particular.

We will therefore confine ourselves here to give a general method, without its being drawn into consequence for particular cases, that must have been mitigated, altered, and varied, according to their respective circumstances, as we have expressly said already.

The principal end which a physician ought to propose, should, without dispute, be the cure of the disease which he treats: for this purpose he cannot succeed in the present case, but by correcting the fault of the blood, and by preventing the accidents that may happen during the course of the treatment; and tho' I be no great stickler for bleeding, yet should the case require it, we must lessen the quantity of the blood, and empty the vessels, in order to give room to the blood which we would have rarified by the remedy; we must discharge



charge the impurities in the primæ viæ, and all the vitious humours with which the blood and the lymph may be furcharged, lest, when coming to be put in too great a flurry and commotion at the time of the operation of the remedy, these should occasion some injury, and obstruct its efficacy.

It is <sup>a</sup> still necessary to examine if the blood be too thin or too thick; in this latter case, it must be diluted; and if it be too acrid, it must be sweetened; so that the humours which are separated therefrom, either by urine <sup>b</sup>, or perspiration <sup>c</sup>, or purgation, may have less acrimony.

In a word, it is necessary to soften and take down the springs of the parts of the viscera, in order to render the vessels and fibres more lax, and that they may, without any bad symptom, bear the encrease of the circulation of the blood, the more copious secretion and excretion of the humours, and the entire resolution of the obstructions that might impede the circulation of the blood.

*The previous preparation.*

To obviate therefore, and prevent the accidents which we have just mentioned, we must, 1. Draw blood from the patient's arm in the vena basilica, the quantity should be

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some

<sup>a</sup> Here I speak according to the galenic doctrine, not to enter into a question which would carry us too far from the subject in hand.

<sup>b</sup> See Willis, and Davaché de la Riviere.

<sup>c</sup> See Sanctorius's Statical physick, and M. le Breton.

somewhat large, yet still in proportion to his strength, age, and constitution, and the climate where he lives; so that the too large bleeding may not weaken the patient, whose strength must be kept up, it must be done with a great deal of prudence and discretion, and good blood substituted by prescribing proper aliments, assisted by the remedies which are to follow. Thus, upon this article, it lies upon the wisdom of the physician to examine, if there be a plethora, or a tendency to putrefaction.

2. The day following the patient must be purged with Grimaldi's pills, of which we have already spoken and given the composition, which is the best purgative can be used; about the evening of the same day he is blooded, that is, on the eve of the purgation, he must take, before he goes to bed, an emollient glyster, that the purge may work the better.

3. Then he must use for some time the compound baths of luke-warm, very clear, and pure water; that is, there must be boiled apart a sufficient quantity of guijac, china-root, sassa-parilla, and sassafras, in about five or six pints of water; the decoction must be squeezed out, the water strained through a linen-cloth, and poured quite hot into the bath.

One cannot determine the exact number of baths to be given, nor the time the patient must continue therein, because that depends on the strength or weakness of the patient,  
his



his dry or moist constitution; wherefore that lies upon the prudence of the physician to determine. But I do not foresee that he must have more than twenty, or less than ten baths. He must take, while in the bath, a large cup of whey, in which is to be dissolved two drams of our solar balm: this is to be observed in the first bathing, which is to be done in the morning fasting, in case that the patient can bear two aday; a thing which is to be determined by the nature of the case, the particular circumstances, and the physician; wherefore, at the second bathing, he must take nothing, and must continue therein about an hour.

Water in general is a sovereign remedy, whether it be taken inwardly by way of drink, or be used by way of bathing. I very much approve, upon this head, all that M. Haguénot has said of it in an academical thesis which we have given an account of in this treatise. For my own part, I am, perhaps, but too much inclined to extol its virtues; and I have sufficiently explained them in an hermetical discourse, which may be seen at the end of the posthumous works of the late M. Grimaldi, first physician to the king of Sardinia. It is the best dissolvent in nature; it does not break nor destroy the bodies it dissolves; it separates their parts without violence; it detaches them from one another; it parts them, and only alters their union. Water dilutes, detaches, and dissolves all the



salts; which is partly what we want by prescribing baths: water opens up, and clears the smallest tubes; it washes and refreshes them, and it is often an excellent sudorifick. More authors<sup>d</sup> than one have alledged that pure water cures the king's-evil: however, one must not suffer himself to be imposed upon, baths must be used with caution, discretion, and prudence, because the body may thereby be too much compressed, which often weakens the patient. It is certain that baths, which saved the life of Augustus, killed young Marcellus, and very much discredited Musa, the Emperor's first physician, who had brought them into vogue.

4. When he has done using the bath, the patient must be purged again with the aforesaid pills of M. Grimaldi.

5. During these preparations, and even through the whole course of the treatment of this malady, there is prescribed a regimen of softening, moistening, and cooling food; the patient is restricted to the use of aliments easy to digest, of good nourishment, and taken moderately. He may eat capons, partridges,

<sup>d</sup> Dr. Brown, in his treatise on cold baths, assures us, that there is not a more effectual remedy to cure the king's-evil, than to bathe the patient in cold water. Notwithstanding the experiments which he gives an account of, 'tis going a little too far. See on this subject the different treatises which have been written on water, as curious as they are useful; among others, the medicinal virtues of common water, by Mr. Smith, where one will find that beautiful dissertation on ice by the learned and admirable M. de Mairan, perpetual secretary of the royal academy at Paris. See likewise the theology of water by Albert Fabricius, doctor of divinity, and professor at Hamburgh.



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tridges, pullets, good broths, good soups, pretty succulent, and be contented with boil'd and roasted meat, and the above-mentioned victuals, a little beef and mutton, no veal and no ragouts, nothing high-seasoned, very little salt, no salads, nor fruits, nor any other crude things; he may drink good old wine mixed with water, the whole taken moderately, as we have already said. In this malady necessary care must be taken against crudities in the stomach; and for this reason we must not fail using the solar balm, which remedies this inconvenience, and which is, at the same time, a mild purgative.

6. Things being in this condition, there must be put into a decoction of guijac well made, two, three, four, five, even six drops, and more if needful, of the spirit of martial mercury, of which we have given the preparation above, B. 2. c. 2. p. 95; and make the patient take it in the morning fasting; two hours after that some broth, in which must be put half a scruple, and even to two scruples, of the essence of viper; and the patient must be kept warm in bed, that sweating and perspiration may be more conveniently carried on. If the weather be fine, nothing hinders but that he may take the air, walk abroad, amuse and divert himself agreeably, avoiding the great cold, the night air, too much exercise and fatigue, and in short the abuse of every thing.



7. At noon he must dine moderately, observing the regimen which we have prescribed; and his drink throughout the day, except at meal-times, must be a ptisan made of guijac<sup>a</sup>. In the afternoon he may eat a biscuit in order to make him drink of the ptisan, and at night, for his supper, a little rice broth, or the wing of a pullet.

8. Failing of the spirit of martial mercury, may be used that made without any addition, the animal, vegetable, and mineral panacæa, of which we have likewise given the preparation in the above quoted place; particularly the panacæa, if the pox be complicated with the king's-evil and scurvy.

9. Every third day the patient must take a large cup of whey, in which two drams of solar balm have been dissolved and incorporated; this will keep the body open, purge him gently, comfort his stomach, make him breathe easy, open and remove all obstructions, discharge bad humours, drive away all sorts of venom, cure the caries of the bones, and all ulcers, and lay all pains, of which it removes the very cause. I will give a more ample account of the virtues and properties of this admirable balm, when I shall give its composition, whose principal virtue arises from the universal spirit which enters into it, and which is drawn from the air by means of a glass ball, made in the form of a cone or egg.

<sup>a</sup> You will find the composition of this ptisan at the end of this first part.



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egg, which is laid upon a tin-pipe, at the bottom of which should be a recipient, or bottle made neat, and clean, with a glass-funnel, in order to receive the spirits: the globe is exposed in the sun-beams, and should be filled with ice and very pure salts, of which I will also give the composition. This vessel should be stopt up, so that nothing may enter in or go out.

As I do not pretend to give a treatise of physick, but only to shew the remedies proper for curing venereal diseases, and to give an exact and natural method for their treatment, I take myself not to be obliged to explain, by a philosophical dissertation, the origin and nature of this spirit; the explanation would be too long, and carry us too far from our subject. Let it suffice then to know, at present, what we have learned from a great number of repeated experiments, namely, that by means of this spirit, and with it, is communicated a quality, virtue, and surprising efficacy, so to speak, to the remedies animated therewith, and with which they have been impregnated in their preparations.

10. And lastly, if the patient be troubled with ulcers, shankers, the king's-evil, and scurvy, and every other sort of symptom, they may be happily cured with the balm applied warm on the part affected. We will explain more particularly all these things, when we come to treat of each of these maladies in particular.

Thus

Thus the phyfician, who will follow this method, and ufe in good earneft the remedies which we have given the publick, as the fruit of our pains, watchings, indefatigable ftudy and labour, will, together with his patient, partake of the pleasure and fatisfaction of feeing all the fymptoms of this cruel malady difappear, and arriving at a happy and radical cure, in lefs than a month, without any troublefome accidents, pains, or a return of the malady.

I flatter myfelf that I have accomplished, in this firft part, what I propofed; namely, made out that chemical remedies, well prepared, are preferable to the common and galenical ones, and given a juft idea of venereal maladies, their caufes and effects, with the fpecifick remedies for their cure: there remains then nothing for me at prefent, but to treat feparately of the fymptoms of this cruel malady, in conformity to my promife and engagements; and, according to my method, likewise to give the fpecifick remedies for their cure; this is what I propofe to do in the next part.

*The fudorifick ptifan<sup>b</sup>.*

Take of guijac, faffafras, falfaparilla, china-root, of each an ounce; which you muft boil in an unglaz'd earthen-pot, with fix  
pints

<sup>b</sup> This ptifan fhould be given on every occafion where we prefcribe the decoction of the above-mentioned woods, having meant no more by the word *decoction* or *preparation*, than this prefent ptifan.



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pints of water, down to four pints, after straining it through a linen-cloth, and pounding half a ounce of our golden antimonial pills to be put to it. The patient must take a chopin of this ptisan every morning before he get up, at three different times, intermitting half an hour between each time, and keeping himself warm a-bed.

*End of the First Part.*

A

# TREATISE ON

## VENEREAL MALADIES.

### PART II.

#### BOOK I.

*In which will be treated separately all the symptoms of the pox, as gonorrhœa's, shankers, phymosis, and others; and in which specifick remedies will be given for each of these maladies.*

#### CHAP. I.

*Of the gonorrhœa, and whatever else relates to it.*

EVERY thing in this world, whether in the practice of virtue, or in that of vice, has its degrees of beginning, middle, and ending. The most abandon'd do not  
set



set out with the greatest crimes; so that in some measure their several pains are proportioned to their respective debaucheries.

It seldom happens that a young man, or a young woman, in losing that precious treasure of their virginity by impure commerce! get all at once an universal pox, whose venom totally corrupts the mass of blood, or that it produces and manifests, all at once, those dreadful symptoms, which when united together, entirely oppress such as are attacked by them.

Moreover, the different vessels or receptacles in the bodies of such young people, which, so to speak, are all entire and fresh, do resist better the impression of the venom, (they being sound, and of a more close texture) than those which being already decay'd, half battered, and worn out in venereal pursuits, are soft, weak, and soon excited, and consequently admit more easily and more plentifully the venom, which meeting with less resistance and impediment, more readily insinuates and introduces itself into the mass of blood.

It is therefore commonly no more than one of these particular pox, known under the name of heat of urine, gonorrhœa's, shankers, bubo's, and others, that are got at the beginning of venereal excess. However I do not lay this down as an infallible rule; I know that it is very possible, one may  
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at the first time be totally infected; but this is a rare case.

Thus, without entering into more prolix reasonings upon this head, having in the first part of this work treated of the pox in general, we are going in the second part to treat of its several symptoms, which are so many species of it. I will begin with the cure of heat of urine, or the gonorrhœa, and all its accessaries.

But whatever inclination I may have of cutting matters short, however as this subject wants to be cleared up in order to understand it well, and to be able at the same time to profit by my method of curing this malady, before I enter into a circumstantial detail, I believe it will not be amiss to make some remarks on a certain method in vogue, after which people run heedlessly, because it is easier and shorter in the appearance.

Though we consider the gonorrhœa as a particular sort of pox, and less dangerous, as to its consequences, than an universal pox, however we cannot say that it is less cruel, dangerous, and difficult to cure radically; and that it draws after it commonly consequences as fatal, when it is ill treated, and when the patients are so unhappy as to fall into the hands of pretenders, quacks, or even some people who are in some reputation, and who pass for able men, but who presume too much upon their pretended specifick remedies, because they stop the running in a little  
I time,



time, without attending that they only suspend the effect without destroying the cause; such are vitriolick and astringent injections, charged with acid and fixt salts, effectually capable of stopping the running, but which never fail of causing fatal symptoms, especially when they are made use of in the beginning of the malady, or before that the venom has been extinguished by proper remedies.

In fact, that matter which runs freely, or which begins to run from the parts where the seat of the gonorrhœa lies, coming to be stopp'd all at once, is gathered together, heated, fermented, and exalted there, infecting whatever comes to it; the venom encreasing in force and quality, flows back, and carries its first impressions into the mass of the blood; and its pernicious virulence, which spreads, by following the course of the circulation through the whole habit of the body, causes an universal pox.

### *Heat of urine.*

Heat of urine has different acceptations; and in order to explain distinctly what this malady is, and to be able to cure it radically, it is necessary to enter into a circumstantial detail, and to divide and subdivide it; that is to say, to consider its causes, and the effects of those causes, each in particular; because they differ among themselves according to their degree of malignity, and according to the seat where they lie; and consequently  
according

according to this difference, which is essential, each must have its proper remedy applied.

The heat of urine therefore is of different sorts; some show themselves by a heat and burning pain which the patients feel in making water; at other times by a heat of urine, with a running of a purulent matter, either yellow or green, with a pain and contorsion of the penis in erection; at other times by a running of purulent matter, without much heat or pain in making water; and lastly, by a simple running of the semen, without any heat or pain.

If the purulent running is accompanied with heat and pain, then it is a heat of urine and gonorrhœa; if, on the contrary, there be simply a heat without running, it is a simple heat of urine. That sort which is without any running of a virulent matter, but either with or without heat, is almost generally venereal; that is, caused by intercourse with an infected person. The method which some debauchees take, in order to avoid catching the pox, by not entering the penis entirely into the vagina in the time of coition, is silly enough, because the venom is so subtil, that it penetrates all along the urethra, and communicates a gonorrhœa with heat of urine; so much the more difficult to be cured, as it is longer in breaking out. The conjoint cause of this symptom, is the inflammation of the prostate glands and veru-montanum, when there



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there happens a gonorrhœa with heat of urine; if it be a virulent gonorrhœa alone, without heat of urine, then there are ulcers in the parts: if, in fine, it be a simple gonorrhœa, there is only a relaxation and a superfluity of serous matter in the prostatæ; if it be a simple heat of urine, it arises only from the saline parts of the urine.

Probably this definition of heat of urine may be found too general, and consequently requires farther explication, because this name does not agree with a great many of the maladies which I have been describing; let us therefore avoid bad explanations, and agree, that all running of the semen, or purulent matter, by the penis, out of the time of making water, should be called gonorrhœa's.

The cause of the gonorrhœa is the same with that of the pox; that is to say, an acid, corrosive, volatile, and contagious venom; and though I have said that the seat of the gonorrhœa lies in the prostatæ and verumontanum, however that varies, and very often its original seat is found in the glands of the urethra, particularly those situated in the anterior part, near the glans; all these glands have excretory ducts, which often lie obliquely in this canal behind and before, and are called blind ducts. These glands of the urethra are the first that present themselves in order to discharge the venom. I do not here meddle with the dispute that has arisen upon this head, on occasion of the opinion of

Dr. Cockburn, an English physician, which contradicts that of M. Litre. This matter is learnedly explained by M. Astruc, who moreover has treated so fully of this malady, that nothing essential can be said, which he has not anticipated; so that the curious, and such as would be farther informed, may have recourse to the writings of this author, where they shall have entire satisfaction. I will therefore only mention what will be necessary to understand this disease, to establish the preference of my method to all others, and at the same time shew its necessity for curing this malady, preferring, before any other consideration, the advantage of curing to that of haranguing.

Independently of the gonorrhœa's which we have mentioned, there is a dry gonorrhœa, that arises from the urethra being contracted by the inflammation and pain it suffers, in such a manner, that the mouths of the excretory ducts of the glands of this canal, of the prostatae and seminal vessels, are entirely stopped up, and let no part of the humour, which they convey, escape into its cavity; so that, in that case, the gonorrhœa no longer runs.

A like stoppage often happens, as I have already observed, by means of astringent injections, imprudently administered, when the virulent semen ceases to run from the seminal vesicles, and its reservoirs are inflamed: this semen is heated, swells and heaves, refuses entrance



trance to that which comes from the epididymides and testes, and thereto communicates its own alterations; and the inflammation getting to these parts, by means of the vessels that come from them, and that are contiguous to the seminal vesicles; the testicles, and even the scrotum, are swelled, hardened, and grow very painful; this is what they call the heat of urine fallen into the scrotum.

The gonorrhœa has still another denomination, under the name of a heat of urine with a cordee; namely, when the urethra resembles a cord, by the contraction or corrugation of its fibres. What gives occasion to this situation, is the inflammation of the urethra, which not being able, notwithstanding the erection, to extend itself as much as the cavernous bodies, makes the penis to bend downwards; but if the suspensory ligament, which ties the penis to the commissure of the os pubis, be attack'd with an inflammation, the penis drawn by this ligament will bend upwards: on the other hand, if one of the cavernous bodies be inflamed, and not the other, it will be bent to that side accordingly.

A woman, attacked with a virulent gonorrhœa, finds almost the same symptoms as a man does, and almost suffers the same pains; that is to say, a tickling and itching is felt in the vagina and prostatae, in proportion as the venom becomes more acrid; this tickling and itching turn to a smarting pain, and a burning heat. There comes on a running of a

white, greenish, yellowish, or ash-coloured matter from the vagina, the lacunæ of the prostatae, and glands of the vulva: all those parts which are irritated by the virulent matter are inflamed; the inflammation communicates itself to the urethra, and causes a dysuria, and sometimes a strangury, of equal pain with that men suffer, of which we shall speak in the sequel.

The internal membrane of the vagina being inflamed, is swelled and contracted, so that the patient cannot bear the approach of a man. A man attacked with this malady, cannot surmount that obstacle without suffering exquisite pain; so that what constituted their mutual pleasure, is now become their punishment.

At length, after long torture and insufferable pain, the gonorrhœa having run plentifully for the space of twenty days, or thereabouts, the glands having almost discharged the venom by this running, and the virulent matter being softened and diluted by the use of proper remedies, the running is abated, the matter becomes white, and no longer stains the linen; then the smarting pain, the inflammation, the heat of urine, and all the other symptoms, insensibly abate and disappear.

*The diagnostick and prognostick.*

It is an easy matter to know a virulent gonorrhœa in men, because all that runs from the urethra proceeds in them, either from the seminal



feminal reservoirs, as the semen, the seminal liquors, and the pus in gonorrhœa's; or from the bladder, the ureters, and kidneys; as the pus, sanies, and glair, in maladies of the kidneys and bladder: though these matters, which come from these different parts, have sometimes a great deal of resemblance, yet they always differ in the manner of their discharge: those that come from the bladder or kidneys, do not pass but in making water, and consequently cannot escape, but when the sphincter of the bladder is dilated, because they come from parts beyond the sphincter; whereas the others, that come from the reservoirs situated on this side the sphincter, run independently of the urine, and notwithstanding the contraction of the sphincter: so that any species of gonorrhœa cannot possibly be confounded with a running of pus or glair that comes from the bladder. It is an easy matter even to distinguish the simple gonorrhœa's from the virulent. The first sort happens to such as use excessive venery, even with women that are sound; and, lastly, to such as use too hot glysters; and sometimes too to such as drink Beer to Excess. The simple heat of urine is not attended with any irritation, it happens without any pain, ceases of itself by taking some cooling medicines, or a little aqua vitæ, after drinking beer, and taking rest, and observing to live temperately. The other sorts are contracted by dealing with a tainted person; they at the beginning cause a great difficulty of making water, con-



tinue long standing and obstinate, and are attended, while they last, with evident signs of acrimony and virulence.

The diagnostick of a virulent gonorrhœa in women is not so certain; all that runs in the vulva, comes either from the bladder, thro' the urethra, as is the case in maladies of the kidneys and bladder; or from the matrix thro' the vagina, as is the case in the whites; or, lastly, from the prostata, Cowper's glands, and the glands in the vagina, as is the case in gonorrhœa's of all sorts. What I have just now said with regard to men, either to distinguish the running of pus or glair, that come from the bladder, from the different sorts of gonorrhœa; or to distinguish simple gonorrhœa's from the virulent, should likewise be understood of women: yet in this sex the gonorrhœa is very often confounded with the whites, which run from the matrix through the vagina, and with which, it must be granted, the gonorrhœa has a great resemblance, when the inflammation has abated; and it is an error which women themselves countenance frequently enough, either because they are really ignorant of the cause of the disorder, or seek to conceal it. I shall not enter into a farther detail on this head, as I shall have occasion to speak of it, when I come to treat of the cure of the whites.

*The prognostick of a gonorrhœa in general.*

We cannot dispense with saying something of the prognostick of a gonorrhœa in general;  
and



and to do it with success, I thought I could do it no better than by following the observations which M. Astruc has given us. I dare flatter myself that this author will not disapprove of the liberty I take, considering my good intentions, which have no other end than to be useful to the publick; and surely I could not, in this respect, draw from a better fountain. I could wish, with all my heart, that I could in like manner follow him in every thing, particularly in the cure of this malady, which is the most essential thing: but in this giving in too much to my own inclinations, I should wander from my purpose and principles, and lose the fruit of my painful labours.

A gonorrhœa being an inflammatory disease, ought, like other inflammations, to terminate four ways, namely, by re-solution, supuration, a scirrhus, or gangreen.

1. The best way is by re-solution, for it cures the disorder quickly and thoroughly, without leaving in the parts affected any bad impression; yet it is rare, because the patients, who for the most part are young people, will not comply with taking remedies, and observing exactly the regimen prescribed them.

2. Suppuration is the most troublesome; it is nevertheless common in all gonorrhœa's, if they be neglected at first; and pretty frequent in virulent gonorrhœa's, what measures soever be taken, when that happens.

The treatment is tedious, because the ulcer and abscess cannot cleanse itself, heal up, and cicatrize, but by degrees.

The cure is less perfect, because, independently of other inconveniencies, there remains an eschar, which when too hard or too flabby must needs contract the urethra, and occasion a <sup>a</sup> strangury in the train of the gonorrhœa.

3. A scirrhus is no less troublesome, for it happens that the scirrhus part compresses the urethra in such a manner, that water is not made but with difficulty, which produces an habitual strangury, that may easily degenerate into a retention of urine.

4. Lastly, the patient is almost hopeless, if the inflammation turn to a gangrene; because being internal, it is a very difficult matter to cure it effectually; but we ought not scarce ever to make so fatal a prognostick of a gonorrhœa, unless unhappily the inflammation be of the most terrible and dangerous sort, unless the patient be absolutely destitute of relief, and the inflamed part be compressed, battered, and bruised, by abandoning ones self to excess with women in the course of the malady, or by being long a horseback, and riding post.

*The*

<sup>a</sup> A strangury may happen in treating gonorrhœa's according to the method that is commonly used, but it is guarded against by mine.



*The prognostick of the gonorrhœa with regard to its different seat.*

When the gonorrhœa only attacks Cowper's glands, a thing that however rarely happens, because these glands being small and situated quite near the skin, topical remedies may be applied with success; and if the running be but in small quantity, and form some abscesses, it may easily be cured, by making an incision in the skin.

If the gonorrhœa attack the prostatae or the feminal vesicles, it is more troublesome, inasmuch as these parts being more considerable, the inflammation is greater, and spreads farther, the purulent running more copious; and in case of an abscess, the cure more difficult and slow.

As to the prognostick of a gonorrhœa, which is only in the spongy texture of the urethra, we shall give a detail of it in treating of venereal shankers.

After having given a distinct idea of the gonorrhœa, we are going to give the remedies that are proper to bring about the radical cure of this malady.

Without entering into tedious reasonings, that very often, far from being useful, or clearing up the matter, involve and embarrass it, and by that means are rather hurtful than profitable, and only tend to make an unseasonable parade of an idle learning; so in order to avoid falling into this inconvenience,  
I and

and to be brief, we will confine ourselves to consider the gonorrhœa under two sorts; the first, which we will call the simple, or mild sort; and the second, the malignant or purulent. After what we have said on this head, it will be an easy matter to make this distinction.

With regard to the cure of the first, the following remedies are sure to effect it: Take half an ounce of the four larger cold seeds, and twelve almonds peel'd, beat them well in a marble-mortar, pour upon them, by little and little, two pints of water, in which some barley and dog's-grass have been boil'd, strain the whole, and if any more remain, beat it over again, and pour upon it some of your water; the whole being strained, put thereto from twenty-five to thirty drops of the spirit of sulphur, or till the potion be of an agreeable tartness, and mix therewith an ounce of sugar-candy. Robust persons, and such as have a good stomach, must drink these two pints in the day-time, or in the night; as to other patients, more or less. To it may be added some spoonfuls of orange-flower-water, to strengthen the stomach: you are to continue the use of this potion for eight days, drinking at meals a great deal of water, and but little wine; and between meals the ptisan; that is, in the morning, in the afternoon, and in the night if one wake. Eight days after the use of this potion, you are to take the following purge:

Diffolve



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Diffolve half a dram of our philosophick nitre, one of our golden pills of forty grains, with an ounce of cassia, in veal or pullet broth. After this purge, take, for three days, in the morning fasting, half a pint of the barley and dog's-grass water, in which dissolve two drams of our solar balm. The regimen as to food, should be moistening and cooling, and white meats preferred to any other: above all, there should be no ragout, and no excess of any kind: three days after, you must take the purge I have just mentioned. After that is done, the patient shall take every morning broths made of meat, with herbs and a little salt. Every night, at going to bed, he shall take half a pint of whey mixed with an ounce of syrup of violets, and that for eight days running; afterwards the purge as before.

This treatment will certainly lay the acrimony of the humours, and soften the parts; and when even there remains some running, one may with security, and without fearing any bad consequences, set about stopping it, both by means of internal remedies, and by injections, which may be done several ways. That which I use by way of preference, from the experience I have had of its good effects, is the following:

Take a glass of good wine, put it into a silver or earthen porringer, make it hot, and as soon as it is lukewarm, you must dissolve therein a dram of my solar balm; and after  
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the whole is well mixed and incorporated, pour it into the syringe, and proceed to injection from three to four times a day, minding that the liquor must be a little lukewarm, and remain for some time in the bladder, in order to have effect.

During the time of injection, twenty grains of our martial salt must be dissolved in a pint of river-water, which you must previously mind to pass through filtering paper, in order to make it more clear and pure; drink four large glasses of it a-day, at some distance from your meals; to wit, one glass in the morning fasting, another half an hour before dinner, a third about four hours after, and the last before supper.

This salt, of which I will give the composition, is admirable, since it alone can cure radically the gonorrhœa, consequently will restore to a perfect state of health, remove the cause, and the effects of that cause, and re-instate nature in her entire vigour.

With regard to the second gonorrhœa, which I call malignant and purulent, when there are just indications to fear that its virulence has attacked the spirits, and communicated itself to the blood, the most certain and effectual treatment, in order to be assured of a radical cure, is to use the same remedies which I do in my method for the cure of an universal pox; so that I will use no repetitions.

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As to the gonorrhœa's known under the denomination of dry gonorrhœa's, heat of urine fallen into the scrotum, as they are very malignant, and as they are always owing to the same cause, though the effects be different, we use for their cure the same treatment and the same remedies as for an universal pox; adding farther, if the case require it, for example, if a considerable inflammation, abscess, or other symptoms, come on; baths, half-baths, bleeding, fomentations, and cataplasms, which an able physician will not fail prescribing according to the circumstances, which should always determine us.

But an essential thing which is not sufficiently attended to, and which even, in some measure, the best authors have neglected, or treated but indifferently, and that is several maladies with which a patient is attacked after the treatment and cure of a virulent gonorrhœa, and even when he thinks he has been radically cured of this distemper, because he finds no more pain, and the great running has ceased.

These maladies are no less dangerous and prejudicial than a virulent gonorrhœa itself, for they are always owing to this, that it has been ill treated by bad medicaments, and consequently badly cured. These maladies, I say, the most considerable, with regard to their consequences and their pains, are either an involuntary running of the semen, which is nothing less than an habitual gonorrhœa,  
or

or strangury, or dysury, which cause the most cruel pains, and occasion ulcers.

## C H A P. II.

*Containing a description of an involuntary running, or habitual gonorrhœa.*

It very often happens, that after the treatment of a long and obstinate virulent gonorrhœa, one is attacked with an involuntary running of the semen continually, more or less, according to the exercise, rest, or excess used by the patient.

If we consult able anatomists, reason, in concert with their experience, shows that almost all the semen which flows through the urethra, comes from the seminal vesicles or prostatae; that which is prolifick, comes from the seminal vesicles, where it is carried from the testicles by the vasa deferentia; that which is lymphatick, comes from the prostatae, where it is separated from the blood. The seminal vesicles open into the urethra, each by a particular canal; it is between these two canals we may observe a little eminence called veru-montanum: the prostate glands likewise open into the urethra by twelve excretory ducts, but which are proportionably straiter, in order the better to keep the semen which these glands contain.

These excretory canals of the semen are so well formed in a natural state, either by means of the complication of muscular fibres,

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which serve them instead of a sphincter, or by means of the spring of the surrounding parts, so that there cannot pass a single drop of liquor, unless the seminal vesicles or prostate glands be strongly compressed, both by the contraction of the membranes, with which they are envelop'd, and by that of the muscoli erectores and acceleratores, as is the case in ejection.

From thence may be concluded, that this running proceeds, 1. From this, that the excretory canals of the semen being too much dilated, they are found enlarged more than ordinary, and remain half open. Or, 2. From this, that the relaxation brought upon the neighbouring parts, does not permit them to shut them up with sufficient force to retain the semen. It is likewise easy to conclude, that what ordinarily occasions it, and especially in young people, and those who are of a hale and good constitution, is, on one hand, the purulent matter of the old standing gonorrhœa, which has dilated by its abundance, and corroded by its acrimony, the canals from which it flows; and, on the other hand, the remedies which have been applied for the cure of this malady were either too cold or too hot, without force, energy, or virtue, unable to effect the cure; on the contrary, rather proper to continue and foment the disorder, and to help this corrosive matter to vitiate these parts.

From this disorder is derived an infinite number of evils, both sensible and insensible,  
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and which are not less fatal. One of the most considerable of this sort, is the impotence occasioned by this malady, which weakens and hinders the ejection, or causes it to be performed too readily and without effect, being deprived of all prolifick virtue: from thence proceed those frequent abortions of women who cannot give a perfect maturity to the foetus, the vessels having neither force nor virtue remaining. People are not wanting, through ignorance, to ascribe the frequency of these abortions to quite another cause.

I call sensible evils those which visibly appear to our senses by a more copious running of the semen, which drains by degrees the spirituous and balsamick part of the blood, and causes a leanness, a phthysick, a consumption, and a world of other diseases, the same with those that proceed from an excessive commerce with women. Without doubt this is enough said upon this subject, and which ought to suffice in order to show the whole importance of this malady.

However, it cannot be denied that this disease, its cause and its effects, have not been perfectly known; but people have been ignorant of the remedies proper to cure it, or at least have not practised them: I have no mind to search into the motives; however that be, here follows the true specifick remedy.



*A specifick remedy for the radical cure of an involuntary running, or habitual gonorrhœa.*

Put into stone pans six pounds of filings of Carinthia steel; let them be very neat and very clean; pour into them good distilled vinegar, to the height of three fingers above the filings, observing at first to imbibe simply the filings like a paste or thick soup, and leave it so in a lukewarm place for three days, in order to ferment in some sort. After this, put to the matter a quantity of vinegar, three or four fingers breadth above the filings, stir the whole with an iron rod; let the matter infuse till the vinegar be very well tinged, minding to stir the whole three times a-day; decant your tincture, passing it through filtering paper, in order to render it more pure: pour some fresh vinegar upon the matter in like quantity; let it infuse as before, stir and filtre it; and you must repeat the process, till you have a sufficient quantity of tincture.

Put all your tinctured vinegar into one or more stone cucurbits half filled; put them upon an athanor in a sand-heat, and sitting on their heads and recipients, distil till the matter be dry, at which time you will find a kind of earth in the cucurbits. You must take care not to urge the fire too far.

Cohobate your distilled liquor upon the earth, and distil it again till it be dry, which you must repeat seven different times in all.

After finishing your seven distillations, take the earth which you will find in the cucurbits, grind it on a marble, imbibing it with its own menstruum, put it into a glass retort well luted to the middle of its capacity, fill it two-thirds up with your liquor, and having placed it half up in the sand, and fitted thereto a small matras, or globular recipient, give it fire by degrees, till there go out no more drops nor steam; let the retort cool, and break it in order to take out the earth that remains at the bottom.

Rectify three times the liquor which you shall have from it, in a very clean cucurbit, in order to purify it from its impurity and a stinking oil, that would spoil the <sup>a</sup> operation: grind the earth of your retort on a marble, imbibing it with your rectified liquor three times; put it into glass cucurbits, and pour your rectified liquor upon the matter to the height of four fingers, fit the cucurbits with their heads and recipients; and having luted the junctures with bands of bladder, let it digest in an ash-heat, with a gentle fire, for forty days, so that the fire may not fail all the time. At the expiration of this term, put the fire out, let the  
cucurbits

<sup>a</sup> This distillation by the retort requires a good deal of care; for when the matter comes to boil upon encreasing the fire, it swells in such a manner, that it would all pass into the recipient, and break the vessels; care should be taken only to make the matter boil slowly; and whenever it comes to swell, to wet linen cloths, and wrap them round the retort, without fearing it will break, and this will keep under the rising. Wet cloths should likewise be applied to the recipient, in order to promote the condensing of the spirits. This distillation is performed in six hours.



cucurbits cool, decant and strain the liquor thro' filtering paper, so that the earth may not mix with it; pour more of the other liquor, rectified three times, upon the earth; stir it, and let it <sup>b</sup> settle well: when the liquor is very clear, filter it to put it to the other; distil all your liquors in balneo mariæ to dryness, and you will find the sal admirabilis.

Dissolve all your salt in distilled rain-water, filtre and evaporate it to dryness; dissolve it again in fresh filtered water, and evaporate it, which you are to repeat till the salt become very white, and has lost the smell of its dissolvent.

Afterwards dissolve this salt in spirit of wine, not deflegmated; filtre and abstract this spirit in balneo mariæ, until the salt become dry, which will thereby become the purer: put your matter into a glass retort, lute and distil in a sand-heat, with a slow fire, till no more come over.

Rectify the liquor which shall come over in a glass cucurbit with a gentle fire, and there will come over a subtile spirit, which will scarcely stick to the head: when you observe that the liquor begins to stick to it in drops, shift the recipient to receive it in another, till there remain almost nothing in the cucurbit.

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<sup>b</sup> Observe, that if you have not a sufficient quantity of this liquor rectified three times for your earth, and in order to extract the salt, you must distil such as contains a greater share of it.

You will by this means have both the spirit and oil, which you must keep separately in bottles cork'd close down<sup>c</sup>.

*The virtues and effects of the true martial salt.*

Should I proportion the encomiums of this remedy to its excellence, I should justly give it the greatest, with which the most severe would be forced to agree : in order to be convinced of this, one need only consider, that the preparations which are commonly made of this metal, gross as they be, nevertheless produce good effects for the cure of some diseases ; consequently, what may not one expect from a salt divested of all heterogeneous earthy particles, and which only contains the essence, sulphur, and spirit of iron, and which is of a solar nature.

But undoubtedly it is very difficult to extract from this metal that which is most essential, for that requires a long time : we have reason to believe, that it is even in part this tediousness of the operations, which is the cause of the ignorance of the greatest part of artists, who content themselves with skimming metals over, as it were : from thence arise the false judgments touching the nature and constitution of this mixt, so as not to be able to know its true decomposition ; which is

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<sup>c</sup> This rectification should be nicely performed, because it is necessary that the spirit be well separated from the oil. This spirit is so subtil, that there do not appear on the capital, either drops, winding streaks, or any moisture.



a knowledge that can never be acquired by means of violent and material fires, which are commonly made use of; there is nothing but a soft, subtle, and natural fire, that can give us the knowledge of it, and which Hippocrates, with a great deal of wit, delicacy, and precision, calls a soft fire; few words, but such as contain a great deal of matter, and which shew all the extent of the profound knowledge of the prince of physick, and that he had not lost his time altogether with his friend Democritus.

I agree that there are some vulgar martial preparations which are made use of to remove the obstructions in the bowels; but is it not to be feared, that in wanting to remove these, the earth, which they could not separate from them, may cause others more dangerous than those they would remove, or cause inflammations in the canals of the small vessels?

From what I have said, I do not mean to persuade the world that the martial salt, of which I have given the composition, is without earth; so far from it, that if it did not contain any, it would not be an usual salt: but I may maintain, that the earth which it contains, is of quite a different nature from that feculent earth which taints the other preparations, since it is no other than a fixed sulphur, which is of the nature of anodynes and diaphoreticks, and which, consequently, is benign and salutary.

It is a thing pretty common for all authors to extol their own remedies, and in suffering themselves to be prepossessed to pass the bounds of a just moderation. I fear not falling into this fault; it is to experience I appeal.

*Its virtue.*

We shall see that this salt cures perfectly all the disorders in the spleen and liver, of which it resolves the obstructions, scirrhus's, and hardness; that it gives to the blood and fluids a free circulation, cures the vapours in both sexes, vertigo's, continual headachs and megrims; that it is admirable against all cardialagias, pains and weakness of the stomach, of which it discharges the ropy phlegm, restores the appetite, dispels loathings and flatus's; that it is a sovereign remedy for the green-sickness, jaundice, whites, colicks, suppression of the menses, dropfies, gonorrhœa's, and its old standing relics; that it softens the acrimony of the urine, hinders the generation of gravel, and drives it out of the kidneys and bladder, as likewise viscidities: for this reason it is very serviceable in the stone, rheumatisms, erisepylas, tetters, and itchings; in dysenteries, and other obstinate fluxes of the belly, fed by ulcers; and for other long-standing and obstinate diseases, that will not yield to any other remedies.

Its use is to dissolve twelve or fifteen grains of it, more or less, in a pint of river-water,



in the manner in which we have already shewn.

This remedy acts from the beginning by insensible perspiration, sometimes by stool, and most frequently by urine; the patients continue to take it till they be perfectly cured, which happens sooner or later, according to the quality of the disease, its degree of malignity, and the injury done to the parts.

This salt is farther taken in doses, from six to seven grains, in vehicles proper for the diseases. In a word, it is certain that this is a sovereign remedy for the cure of an involuntary running, or habitual gonorrhœa, by using injections with our solar balm, after the same manner as we have explained before.

Though the involuntary running and the stranguy, of which I shall treat in the sequel of this chapter, have the same original, which is a virulent gonorrhœa, badly cured or palliated; however, as the effects are different I treat of them differently.

Thus, though my probes be a specifick to effect a radical cure of all the consequences of a virulent gonorrhœa, as we shall shew, and a happy experience confirms it; however, I do not commonly make use thereof for the cure of an involuntary running, because it is often produced by other causes than ulcers, as I have sufficiently made out, or at least these ulcers are no longer subsisting; whereas what distinguishes this distemper from the

strangury, are, almost ever, either caruncles or carnosities produced by actual ulcers, whose callous lips cause the straitening of the urethra, and very often a dysury, or a difficulty of making water. But in the first distemper, such obstacles are not always to be surmounted. On the contrary, we are often under the necessity of regulating the flowing of the urine, which comes too hastily thro' the relaxation and weakness of the vessels, as not to be retained by the act of the will, without uneasiness and pain.

This being laid down, to avoid a multiplicity of remedies, it sufficeth for answering my intention, to use commonly injections of my solar balsam, whose virtues and properties cannot be too much extolled. It is even of great service, in the course of the cure of this distemper, to make lukewarm fomentations therewith, over the whole extent of the perinæum, and to apply plaisters there, which will accelerate the cure, make the vessels, with a greater degree of facility, recover their spring and natural tone.

I pass over this article cursorily, to avoid a long train of reasonings, the thing being so simple as to be self-evident; I therefore keep to experience, and to my happy success in this respect, which determine and fix me in my practice; all this, notwithstanding, without any degree of prejudice, and in pursuance of circumstances, as I have already elsewhere said, which ought always to be

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our rule: for if we have room to suspect that the injections cannot reach to the seat of the distemper, I would say, to the part affected, and that the medicated candles make their way better thither; or even that there have been ulcers capable of producing callous lips, eschars, or other things of that nature, which may be known by means of the probe, handled with address and prudence, without scruple my candles should be used, in order totally to destroy these callosities and fungus's, if there are any, that ever cause very uneasy symptoms, either actually or consequentially. In a word, we must bring to suppuration all the inspissated humours, and carry them off; which the use of my candles will infallibly effect. Let not any one imagine, from what I have said, that a corrosive enters the composition of this admirable remedy; I with truth assure him, he will find himself under a mistake.

## C H A P. III.

*On the distempers of the urethra<sup>a</sup>, under the denominations of strangury<sup>b</sup>, dysury<sup>c</sup>, and ischury<sup>d</sup>, with the specificks for the cure of these distempers.*

**I** Should be too tedious, did I attempt to give a compleat treatise on the distemper called a strangury, and its symptoms: I might act the man of learning at an easy rate, by reciting the different opinions, both of ancients and moderns, as Amatus Lusitanus, Ambrose Pareus, Musitanus, Saviard, Helvetius, Palfyn, de la Faye, Col de Villars, Astruc and others. But nothing further new can be said, after the treatise on that distemper lately given us by M. Daran, surgeon in ordinary to the king. This task was indeed reserved for him, considering the great number of cures he has performed, and still continues to perform, in that cruel distemper.

However the subject is of that importance, and so connected with what I am upon, that

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<sup>a</sup> Urethra, the duct or canal, which conveys the urine out of the body, upon its being discharged out of the bladder.

<sup>b</sup> Strangury, a frequent and involuntary inclination to make water, in which the urine, instead of coming forth uniformly, and in a continued stream, flows only by starts, with much pain and uneasiness, in very small quantities, or only in a dribbling.

<sup>c</sup> Dysury; a difficulty of making water, accompanied with pain and much heat, in which the urine flows however without interruption, and often in the requisite quantity. 'Tis also called heat of urine, because the urine, in discharging, seems to scald the urethra.

<sup>d</sup> Ischury; an entire suppression of urine.



I cannot avoid entering the lists, and giving my sentiments too; which I shall do in a manner very succinct and short.

*A description of this distemper.*

Virulent gonorrhœa's, when they have been for a long time violent and obstinate, and attended with considerable ulcers in the urethra, and these either well or ill cured, commonly cause a straitness of the canal or duct of the urethra, which afterwards becomes so troublesome, that the urine only comes away like an extreme fine thread, and commonly forked, or only in a dribbling, and that with great strainings; this is what we call a strangury. If in this state the patient be heated, and guilty of any debauch, or go to any excess in regimen, this strangury degenerates to a dysury, and even sometimes to an ischury. A dysury produces most troublesome symptoms, as fever, urinous vomitings, lethargy, inflammation of the bladder, fistula's in the perinæum and fundament, which makes the sphincter and anus very painful, inflates the hæmorrhoids, the pubes, and the duct of the urethra; all which are found complicated, and cause the patient to make loud and pitiful outcries. The ischury is a total and absolute suppression of the urine, which makes it regurgitate towards the superior parts, whereby the pain becomes insupportable.

The cause of this sort of strangury has been considered by the ancients, as from carnosities or excrescences of flesh, either fungous or callous, produced in the urethra, in consequence of ulcers there, as there are of them formed in all the other viscera.

Others have ascribed this straitness of the urethra, to hard, callous, and prominent cicatrices, which made the duct straiter, as they were so many bridles to draw it in.

Others, in fine, have maintained that there were no carnosities, and that it was only an inflation of the spongy texture of the canal of the urethra, which straitened the duct, occasioned by the varicose vessels, which enter into its composition.

Without engaging in a circumstantial detail of the nature of the urethra, it sufficeth to know, that it is a duct continued with the neck of the bladder, and terminating in the extremity of the glans; that at its origin, near the neck of the bladder, we observe the aperture of several small ducts, called ejaculatory, which open near an eminence, called *veru-montanum*: there are others observed as coming from the *prostatæ*, both superior and inferior; which glands are situated near another small eminence, called the bulb: besides, the whole continuity of the urethra is of a spongy texture, excepting, however, a place near the neck of the bladder, which forms the origin of the duct, which is simply membranous, and straiter than the rest of the canal,



nal, which is no ways covered with a spongy texture, nor immediately by any other part depending on the urethra.

Now this being laid down, in a heat of urine there is an ulcer in the prostatae, and often the acrimony of the matter, charged with an acrid and corrosive virus, by running along the canal, produces little ulcers on the internal membrane of the urethra; tho' these ulcers of the prostatae be cured, these glands remain much larger than they were before the distemper; and as they are situated at the Neck of the bladder, by their volume or bulk they cause a compression, which makes the urine come away with more pain than usual, and in a finer jet or thread; for that time the course of the urine is retarded in the urethra, and no longer comes away in an arch as formerly, according to the rule, that a fluid passing out of a narrower into a larger canal, loses of its force.

Besides, the smallest ulcers of the urethra, produced by the acrimony of the matter, in cicatrising, straiten and confine the sides of the urethra. Now the urine in coming away, will make an impetus upon the sides of the duct that are less strong, separate and dilate consequently the membranous part, and in time produce fistula's in the perinæum, which will be followed by troublesome symptoms, and extremely difficult of cure.

It often happens too, that the veru-montanum has been excoriated, that it is tume-  
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fied, hardened, not only for the course of the urine, but besides for the ejaculation of the semen, which it renders effete, as it only flows along the duct, without being impelled and darted with any force; which is one cause of impotence. Besides, neither urine nor semen can flow, without causing much uneasiness and pain to the patient.

In order to cure this cruel distemper, and remedy the symptoms it brings along with it, hitherto, without effect, every thing has been used that was thought capable of being a remedy for it; but, not succeeding, an incision was resolved upon to be made in the perinæum, like that which is made for extracting the stone from the bladder.

The late M. Collot, a celebrated lithotomist, became distinguished in this operation, which was called catheterism; but M. Astruc, whom nothing escapes, has very judiciously remarked, that this method, how ingenious soever it appeared, was highly pernicious. Experience has shewn, how much the encomiums bestowed on these operations were ill grounded, since the patients, after suffering a great deal in the operation, found themselves, after the wound was closed, worse than before, because the part of the urethra, on which, with a catheter, was introduced a seton charged with corrosives, deterfives, or mundificatives, still continued straitened by the cicatrice formed there, which rendered the passage of the urine much more difficult,  
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and put the patient out of hope of any cure. 'Tis certain we should not resolve upon making incisions and amputations, but in extreme and desperate cases.

It is easy, from what has been said, to discover the extreme cruelty and danger of this distemper, and that our predecessors being reduced to such extremities, were ignorant of the genuine specifick for its cure. At length the happy hour was come, in which M. Daran had the good fortune to deprive me of the honour of employing, for the service of the publick, the medicated candles of the late M. Grimaldi<sup>e</sup>; the application of which, by introducing them into the penis, is an infallible remedy for the cure of the strangury and carnosities of the urethra: for it is in vain to quibble and shift, in order to determine whether they be carnosities, excrescences, caruncles, or inflations, which cause this distemper. M. Daran, and, before him, Pareus, that famous practitioner, and M. Col. de Villars, and Astruc, have shewn that they are carnosities; and in spite of what Dionis, and those who affect to be of his opinion, have advanced, that there are carnosities dissection lays open to our view, and affords an evident proof of them. 'Tis no less evident and certain, that the medicated candles of M. Daran, and mine, effect a radical cure in this distemper, without any bad symptom to be apprehended.

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<sup>e</sup> By way of remark; see the preface.

The great number of observations advanced by M. Daran in his book of the cures he has performed all over Europe, for the space of twenty Years practice ; observations cloathed with the greatest degree of authenticity, as either the attestations and certificates of patients, or those of the most celebrated physicians and surgeons of our day, suffer not the most critical and incredulous to doubt of the efficacy of this remedy.

But tho' we truly maintain, that our candles and probes are the only specifick for the cure of these distempers, I mean not to exclude internal remedies, nor a certain regimen too, in the course of introducing the probes : on the contrary, I am persuaded not only of the usefulness of both, but of the necessity and indispensableness of their use for the cure of these distempers. We shall plainly shew the importance and consequence thereof, and at the same time give the remedies.

We have advanced, as a certain principle, that to arrive at a radical cure of the affected and vitiated parts to be found in the duct of the urethra, wherever placed, and what form soever they put on, of caruncle; fungus, excrescence, carnosity, callosity, or inflation, you must set the original gonorrhœa a running afresh.

We affirm still, in order to give greater light to this whole affair, and to avoid repetitions hereafter, and unfair glosses and equi-



equivocations, that the shortness or length of these distempers depended on the time these humours took up to suppurate in, a delay that must never be put to the score of the remedy, but justly to the degree of malignity of the malady, according to the time of its settling, and to the nature of the obstacles upon which the remedy operates, and which are more or less disposed to receive the fermentative motion, which produces suppuration, by opening and dividing the inspissated liquors in the callous lips of ulcers, and thereby to assist the tonick or contractile force of the fibres.

I hereby, without any ambages or affected obscurity, set forth my mind; consequently, the ulcers are what produce these vegetations, and an ill-cured gonorrhœa what has produced these ulcers, which have formed a kind of barrier or eschar, interrupting the purulent running of the gonorrhœa, and yet it is on the continuation of this running, that the cure depends; since, on the contrary, its suppression produces the symptoms which distinguish these distempers.

In a manner that the pocky virus of the gonorrhœa, being unveiled, unmasked, and drawn forth from its place of concealment, being in some measure regenerated and brought to light by means of the suppuration and running, which could not have been effected but by the action of the fermentative motion; in a word, by destroying

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these eschars, excrescences, and carnosities, which served it for a covering; is it not to be feared, it will be said, that disengaged from its confinement, and set at liberty, becoming stronger and more dangerous by the fermentation, whereby it was agitated, it will regurgitate into the blood, and infect, with its poison, the whole habit of the body.

By no means; we well know the power of our probes, and their efficacy upon these distempers; if they have, in some measure, succeeded to rouse the principle of the original gonorrhœa, which alone has given rise to the disorders of the urethra, and to draw it forth from the tomb where it lay buried, the virtue of these probes must be sufficiently strong, and their power sufficiently extensive, drawing it not only from its retrenchments, but killing it without resource, and extinguishing it for ever, without hope of being able to recover itself, and consequently guarding against its violence and virulence, and against its future progress, and all its uneasy symptoms. Besides, we shew no respect to so inhuman and dreadful a monster, which causes so much pain and uneasiness; we give the probe the salutary aid of good medicines, taken internally, and properly administered, and then the victory will be more speedy, more secure, and compleat, and the enemy be vanquished without resource: but inclining to make no secret of a matter so important, we frankly and openly declare what  
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the remedies are we add to the use of the probes.

Make a ptisan of the root of hound's-tongue ; in a pint of this ptisan you will dissolve fifteen grains of our sal martis ; of this the patient is to drink four times a-day, and that before meals ; its good effects will be experienced with great satisfaction ; 'tis a narcotick and lenitive plant ; it may be also used in broths to assuage the pains of a gonorrhœa, and diminish the catarrhus cough : the juice also of this plant may be used in pills for the same indications. Externally it is resolvent and lenient.

A very excellent remedy taken internally for the cure of this distemper, is the root *pareira brava*, so justly extolled by de Pille and Helvetius, of which great use, and with success, is made in Brasil and Portugal ; it gently ferments with the blood, is charged only with some volatile sulphurs proper to carry off the obstacles to the course of the urine, whether caused by gravel, slime, or other symptoms.

The manner of using it, is to boil an ounce of this root beat and shred, with a dram of our philosophical nitre in a pint of water ; after five or six seethings, it is taken off the fire, and left to infuse till it is cold. The liquor is to be strained, in which dissolve fifteen grains of our sal martis ; a glass of it is to be drank every four hours ; it may be also given in substance. The dose is half

a dram, fifteen grains of our philosophical nitre, and three of our sal martis, to be repeated every four hours ; and this conduct to be observed till a compleat cure is effected.

We are indebted to the zeal and skill of M. Helvetius for the composition of a balsam which he prepared from this root, for facilitating its use, in order to a commodious using of it in voyages and the field. “ And  
 “ I have experienced, says that great phy-  
 “ cian, that it is equally a specifick for the  
 “ disorder of the kidneys and bladder, as the  
 “ quinquina, the hypecacuana, and alum, for  
 “ the disorders in which these are used with  
 “ so much efficacy.” As the composition of this balsam is but short, as it is an excellent remedy, and as every one is not possessed of M. Helvetius’s book, I shall give the manner of its composition.

*The diuretic balsam of pareira brava.*

Take of oil of scorpions, compounded in the manner of Mathiolus, a pound ; of the balsam of capivi five ounces, of the balsam of sulphur terebinthinated four ounces, of liquid stirax two ounces, of yellow wax fix ounces ; of the root of pareira brava, in fine powder, half a pound, of sal armoniac two ounces, of good Spanish wine two pounds ; boil the whole on a soft fire, stirring it always with a wooden spatula, till the wine is entirely evaporated, then take it off the fire, and pass it hot through a strainer by a strong expres-



exprefſion; and when half-cold, add to it three ounces of black baſam of Peru, which you will mix well with the ſpatula. When all is cold, put it up in an earthen pot well ſtopped; the doſe is half a dram; you may leave out the wax if you will.

Let us obviate the objections which may be made to the diuretick remedies which I uſe in the cure of the diſorders of the urethra. And to do this in an orderly and rational manner, and that we may be enabled to know all the utility of theſe remedies, let us give firſt a definition of what we underſtand by diuretick remedies, and their effects upon the ſerofities; let us diſtinguiſh the good from the bad effects of the ſerofities in the human body: and laſtly, let us explain in what caſe theſe remedies ſhould be adminiſtered. Theſe difficulties we ſhall reſolve in a manner very ſhort and ſuccinct.

I. The ſerofity forms the greateſt part of the blood and milk; it is mixed with the blood in the lymphatick veſſels; it is even confounded with the lymph, tho' very different from it; and it is ſeparated from the blood and lymph in the kidneys, and other parts of the body, to form the matter of the urine, the ſweat, perſpiration, the ſpittle, and other excrementitious, ſerous humours. It is the diſſolvent and vehicle of the ſalt, and of ſome, the moſt attenuated, earthy molecules; it is ſupplied to the maſs of blood

with the chyle, by the most aqueous parts of the aliment.

Of all the humours which compose the blood, there is none so necessary as the serosity, because it is what gives it its fluidity, and fits it to be distributed over all the parts: but if it is highly useful, it may also cause many disorders, when it exceeds and drowns the whole mass of blood, induces a change on the other humours, weakens the ferments, and relaxes the solids, and causes an infinity of distempers, which I wave to avoid prolixity, and which are otherwise well known; which shews the necessity of remedies. To guard against, or to cure these distempers, the most efficacious are those of the class of diureticks.

Diureticks are what facilitate and effect the evacuation of the serosity, when it is hindered. Thus we call diuretick every remedy which passes readily by, and provokes urine: there are two species of diureticks, one hot, the other cold; the hot are those which, by their saline parts, both fixt and volatile, excite and animate the spring of the fibres, encrease the motion of the blood, attenuate, melt down, and break the sulphureous parts, which thicken and entangle the serosity of the blood. M. Tournefort in his *materia medica*, after entering upon the detail of the mixts which compose these hot diuretick remedies, denominates them diureticks improperly



perly so called, and ranks them with aperients.

The cold diuretics are such as relax the fibres, lubricate the urinal passages, blunt the acrimony of the humours, dilute and cool them, and by their aqueous parts encrease the serosity of the blood.

From what has been said, we may easily see in what cases diureticks, and which sort, are to be used. We should avoid the use of hot diureticks, when there is a phlogosis or inflammation of the parts destined for the evacuation; in like manner we should avoid both the hot and cold in the disease of the urethra, when we observe an actual and plain disposition to an ischury; because the abundance and stay of the urine would then, in that case, cause grievous pains and ulcers in the perinæum, to make itself a passage, and would regurgitate into the blood, and produce numberless other evils, which determine the making the puncture, and the having recourse to incisive instruments, operations equally grievous with the distemper itself, and which often bring on the death of the patient; but necessary operations in some cases.

These diuretic remedies are therefore only salutary in the dysury, which we said was a difficulty of making water, accompanied with pain and much heat; in which, however, the urine runs in a continued stream, and sometimes in the requisite quantity; a dis-

temper which is the forerunner of the ischury, or a total suppression of urine, a mortal symptom, a grievous extremity, which may be avoided by the use of our probes, and the aids of internal remedies properly administered.

In fine, one of the best remedies to be taken internally, and the use of which I advise, because the perfect knowledge I have of this remedy, its virtues, qualities, and properties, confirmed by a course of happy experiences, often repeated, and always favourable, has convinced me of the certainty of its good effects, having, without reserve, all the good effects of other remedies, and that is my solar balsam, dissolving an ounce of it in a gallon of milk, mixing and diluting them together, and taking it lukewarm, of a morning, on an empty stomach, during the course of the cure. This remedy, without having any acid, and only by its balsamic virtue, checks the too impetuous motion of the blood, braces the fibrous parts, expresses the serosities, and promotes their more easy discharge into the kidneys.

This remedy purifies the urine, carries off all its acrimony, all the noxious and viscid slime, which lodges in the bladder, when the patient complains; deterges ulcers, helps forward the cure, keeps an open belly, strengthens nature by preventing crudities and bad digestions, and remedies every thing which might hurt the cure, and obviates every uneasy



easy symptom and bad consequence. These are not words thrown out at random, to heighten and cause an ill-grounded confidence in this remedy, but real and evident facts : I repeat it, without fearing to exaggerate, I have always observed the extremely happy and unexpected effects of this remedy, which in a surprising manner concurs with my probes, for the cure of all the disorders of the urethra, and effects this cure readily, agreeably, and without any bad symptoms ; a cure permanent and radical, without leaving any trace of the distemper, or apprehension of its return ; advantages, I may affirm, I have above M. Daran.

With regard to women, it is rarely they are seized with the stranguy, even after many virulent and obstinate gonorrhœa's, because the urethra in them is shorter and wider than in Men, consequently it cannot be so easily straitened or compressed ; and chiefly, because the reservoirs of the seminal humour, where is the seat of the gonorrhœa, are in women, either at a distance from the urethra, as Cowper's glands, and those of the vagina ; or, if near, yet they open not into this duct, and cannot so easily communicate to it their disorders ; which regards the prostaticæ too, though placed about the urethra in women who have their excretory ducts, called lacunæ, in the superior parts of the vulva, and not in the urethra. And yet it is not impossible for women to be taken with  
this

this malady; and when women have it, the same remedies must be used for them, as was prescribed for men.

I shall be but very brief in explaining the regimen I prescribe the patient during the cure, since in general, unless in the case of an inflammation, a fever, and other symptoms, which the circumstances ought to regulate; bating these symptoms, I say, the regimen is quite simple and uniform; good broths, good soups, beef, mutton, and fowl; in a word, without exceeding either in the solid or liquid aliments; the drink, a good old wine diluted, abstaining only from fruits, salads, and other crude things, salt and spices; the exercise, application, and labour, also to be moderate and reasonable.

May I be allowed, before I close this chapter, to make this reflection. 'Tis a thing unheard on, that we should be obliged to preach up temperance to men, and that we should almost ever do it without effect, and talk, as it were, to the air; and yet their own interest, reason, and even, in some measure, a certain point of honour, ought to engage them to it; for it is of the last consequence to preserve health and prolong our days, that the quantity and quality of our meat and drink be exactly regulated, and justly proportioned to our digestive faculties; our bodies crave only a determinate quantity of aliment for their sustenance; and if we did observe an exact proportion between the quantity



tity we take in, and the force of the stomach, we would often guard against acute diseases, and oftener still against chronical; and we should be also enabled to live as long, and have constitutions as good, as strong and lasting, as our fathers had, without much disease and pain.

The spring of chronical diseases is, first, the viscosity of the juices, or the too great extent or bulk of their component particles, which not being sufficiently broken by the digestive faculties, stop short or retard the circulation. In the second place, 'tis the too great abundance of sharp and acrid salts, by means of which the juices even become so corrosive, as to penetrate the solids, and wear them out. In the third place, 'tis a relaxation, or a want of a necessary force and vigour in the solids themselves. Excess in the quantity produces the first, the bad quality of what we eat and drink causes the second; and both together, joined to the want of proper exercise, produce the third.

#### C H A P. IV.

*Of the ulcers called venereal shankers.*

**T**H E R E are several species of ulcers, which take their rise from the pocky virus; there are also those properly called shankers, which differ much even among themselves, some being worse than others, and therefore are called either benign or malignant.

lignant. There are other different ulcers, some scrophulous, others scorbutick, and others, with each their peculiar denomination, to distinguish and avoid the confounding them, because being different among themselves in character, they ought to be treated differently; and that for each species and kind of ulcer, which constitutes a particular disease, proper remedies should be used, as M. Sauvry very judiciously remarks, in his treatise of medicines; what is good for one ulcer, is very bad for another; an observation he expressly makes upon the treatment of cancerous ulcers, which are precisely those that are the subject of this chapter.

*A description of shankers.*

Venereal shankers are small malignant callous ulcers, bordered commonly with a hard and yellowish circle, and discharging a ferous greenish pus, inclining to a yellow or grey, thick, viscid, and clammy, which commonly produces the like ulcers in the neighbouring parts; which shankers are caused by a pocky virus.

These ulcers, for the most part, arise on the natural parts of both sexes, sometimes in the mouth, on the lips, and nipples of nurses; but ordinarily they occupy the convex part of the glans, or the corona, the internal surface, or the edge of the præputium, with the inferior part of the glans.

Sometimes



Sometimes they are few in number, and distinct, at other times numerous and confluent; sometimes they are crowded together and disposed in flakes; at other times they form a species of circle round the corona glandis, and make the præputium tight about the glans. Lastly, it happens sometimes they are very bad and malignant, according to the testimony of M. Guifard, physician of the university of Montpellier, in his fifth observation, where he relates, that a young man between thirty-five and thirty-eight, was taken therewith in so terrible a manner, that when he saw him for the first time, his body was all over cavernous, eaten by a malignant cancer; the glans, which stuck only by a thread, was extremely sensible, and already cancerous; the duct of the urethra perforated almost over its whole extent, like a watering-pot, when the urine was discharged, and the suppuration, which began above the pubis, seemed ready to gain the lower belly. Above all this, the patient saw himself daily wasting with a slow fever, which gradually weakened him, and of which he died.

But there are benign shankers; such are the round and superficial, and those having few callosities, and a whitish bottom, yielding a laudable pus, and whose edges are neither ruddy nor very prominent; whereas the malignant have an irregular and angular figure, a black livid cavity, or of a deep red, very hard, callous lips, which discharge a serosity rather

rather than a genuine pus ; and which spread and extend themselves still more and more round about the parts.

These shankers, produced from an impure commerce, if they arise from a recent virus, are not so dangerous ; and we may guard against them, if we have the precaution after the act of impure commerce, to wash with wine, brandy, water, or urine ; but if they arise from an inveterate pox, they are very bad, and of difficult cure, because owing to an old virus ; forasmuch as they arise not from a virus communicated externally, but from a virus lying concealed a long time in the blood, and which circulating with it, is conveyed into the sebaceous humour of the skin ; consequently these cannot be cured without removing the cause.

But independently of these necessary observations, in order to know the nature of the cancer we are going to treat on, to enable us to administer the proper remedies, it is of no less importance to distinguish the difference of character, according to the place they occupy : those of the præputium in men, are generally worse than those of the glans : and in like manner in women, those of the clitoris, or carunculi myrtiformes, are worse than those of the labia or nymphæ. Those of the glans occupying the frænum or corona, are more malignant than those occupying its surface or sides ; those situated upon the edge of the præputium are more so, than those  
situated



situated in the middle, or on the root of this part.

The reason of these differences, which greatly puzzled the ancient physicians, is notwithstanding very simple and clear. In men the præputium being the duplicature of the membrane which covers the penis, the pocky venom easily slips in between, and from thence is conveyed into the other parts of the body. Besides, this part being more nervous, consequently more abounding in spirits than the glans, which is but a spongy and fleshy part, the irritation and inflammation which are there produced by the acrimony of the pocky ferment, joined to the pain caused by the sensibility of the spirits abounding in this part, should augment considerably the volatilisation and penetrancy of the virus; consequently the ulcer or shanker, in this nervous part, is more dangerous and malignant than in the other fleshy and spongy part: for the same reasons the parts in women tainted with shankers, are affected with a greater or less degree of malignity.

These observations are doubtless extremely useful to give a perfect knowledge of the nature of shankers; yet let us take the matter higher, and go to the source, which will clear up the thing, and convey a more perfect understanding of it. Let us then say, that the venereal virus is generated in the natural parts by the corruption of several different semens received into these parts of the

woman, where the first fermentation is begun, as I have explained it when treating of the universal pox. If the virus penetrate to the mass of blood of the woman, it produces the pox; if it insinuate only into the lacunæ of the glands of the vagina, of the vulva, or meatus urinarius, it produces the gonorrhœa; when it only lodges on the external tunic of the vagina or vulva, it causes tubercles, and produces shankers on that tunic, which is lax and spongy, it sinks into it, and insinuates into the small lymphatic vessels, which are there distributed; and as it is highly acid, it thickens and coagulates the lymph it meets with there, with which it mixes: this coagulated lymph obstructing and thickening what it conveys thither, increases in bulk, and forms a little tumour, which straitens and compresses the capillary blood-vessels which creep round it. The blood slackened in its course, is accumulated, heated, rarified, and redoubles the contractions of the small arteries, which it fills above the ordinary pitch, the thickened and obstructed lymph being heated by the blood, besides comminuted and attenuated by the redoubled strokes of these small arteries, is dissolved and changed into a pus; the sulphureous parts are broken; the saline, opened and disentangled, become more acrid, gnaw and eat away the part, and cause the tumour to degenerate into a small cancerous ulcer.



The woman infected with this virus, communicates it to the man in copulation; the glans, whose texture is spongy, and the preputium, whose pores are still more open during the erection, imbued with this virulent humour, are easily penetrated thereby, having upon them the same effect as upon the vagina; and thus it produces shankers, and reciprocally the man with shankers, or other venereal distemper upon him, taints the woman he has commerce with: this is the most common way wherein this venom is communicated from the one sex to the other.

But if a person has venereal cancers in the mouth, and you drink after him in a glass where some of the virulent and purulent spittle shall happen to remain; or if lovers should lasciviously kiss an unsound mistress, the virus fastening to the lips, gums, tongue, or palate, will produce cancers there, as it does in the natural parts; or if a child suck a tainted nurse, its mouth will become cancerous; if the nurse suckle a tainted child, though sound herself, her nipples will come to have cancers.

Shankers may arise from internal causes, as we have said, in all the places where we have spoken thereof; in this case it is a symptom of the universal pox, and consequently they are cured only, as I have said, along with this disease.

When one is taken with shankers and a virulent gonorrhœa at the same time, or with

shankers or venereal bubo's, or that the one comes upon or succeeds the other, 'tis commonly a sign of the pox; and shankers neglected, or ill treated, often give this disease.

If there are many shankers, if they are contiguous, and touch each other, and if of a bad character or sort, the parts of the genitals which they gnaw and eat away, as the glans and preputium in men, the origin of the vagina, the carunculi myrtiformes, the nymphæ, the clitoris, and the labia in women, are tumified and inflamed; this causes and prognosticates a phimosis, paraphimosis, crySTALLI, cancer of the glans, gangrene, and sphacelus, diseases, of which I shall hereafter treat in particular.

Musitanus, a famous physician of Naples, relates, that some authors of his time imagined that these ulcers were caused by the fault of the liver tainted by the virus, in which they supposed that bad humours are generated; from whence being afterwards expelled by the force of the expulsive faculty, they are transmitted to the extremity of the penis, as if that part were the emunctory of the liver, disposed to receive all its excretions.

I have no inclination to refute notions so ridiculous, they sufficiently refute themselves. A man must be in great want of, and at a loss for good principles, to have recourse to such chimeras as these: but some modern authors, I mean those who have acquired a greater degree of reputation, fall into another extreme;



treme; learned in appearance a good deal more than in reality, they affect to make a parade of the wealth they are not possessed of; are eloquent, diffuse, dispense without rule or measure their crude and indigested thoughts; form new humours, or at least bring them on the stage, and make them act imaginary parts. In a word, they destroy the rules they pretend to prescribe to our observation in the cure of diseases.

For my part, I ingenuously own myself not to have genius sufficient to give futilities a certain air of importance and weight, in the manner of retailing them: it is true, that upon examining these things, we only find an empty and vain turgidity, and things so indifferent and foreign to the subject, that no just application or use can be made of them, and consequently no advantage be drawn from them; the good things (for sometimes there are such) are overwhelmed by the bad.

Besides, they affect to give us large quantities of medicines and receipts, as a proof of their great knowledge; but this is to make a parade of an empty science, since one good remedy is sufficient to cure; and this one good remedy is what we ought to seek for, find out, and administer properly, to arrive at a radical cure.

That our complaints may not be in vain, let us endeavour to make the proper applica-

tion to the subject we are now upon, in order to benefit thereby.

I then say, that the shankers which are produced, and are the symptoms of an inveterate pox, should be cured by the same remedies as were taught for the cure of the universal pox, and to which we must necessarily have recourse.

But the shankers produced by a recent virus, because the ferment has been conveyed no farther than the part affected, which at first received it, and of which I have spoken sufficiently above, these sorts of shankers are more easily and happily cured than others, by ways more gentle and easy.

I would say, that it is not necessary to cauterize all sorts of real shankers, to use the red precipitate, especially without precaution, the lapis infernalis, the sublimate corrosive, to make the eschar fall off with suppuratives, to often purge the patient with mercury, such, and as ill prepared, as that which is commonly used; to order frictions, as is still too often used, under pretence of purifying the blood; and that it is difficult for a shanker to remain long in a part, without slipping insensibly some particles of the pocky ferment into the mass of the blood, which might communicate the universal pox, if we neglected to take all these precautions.

This method is pernicious, teasing, uneasy, tedious, embarrassing, causes insupportable pain, and at length puts the patient in-

to



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to a worse and more pitiable state than when he first began upon a course of remedies.

Let us oppose to this method, that which we ourselves practise, which is more sure, more gentle, and out of the reach of every uneasy symptom; and let us add, to omit nothing that may be of service to the subject, the genuine specifics.

The best conduct to be observed in these sorts of ulcers, is to make them suppurate well, particularly those under cover of the part; and for that purpose we must take an ounce of suppurative, cause to melt it, and add to it half an ounce of oil of hypericum, and a dram of flowers of sulphur; to be held before a soft fire, and stirred from time to time with a wooden spatula; and when the mixture turns black, remove it from off the fire, and when cold, make plaisters of it to be applied on the part, and shifted twice aday, till there is no longer any suppuration; that if there is formed any induration or real appearance of greater malignity, these shankers may be washed with our spirit of distilled mercury without addition, as was taught in the first part of this work: and in defect of this infallible specific, they may be washed, deterged, and have applied to them our water, admirable in all sorts of ulcers, the composition of which I shall give at the close of this chapter. In defect, I say, of these two sovereign and infallible specifics, the red precipitate must be applied; and when the

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hardness

hardness is well opened, a little of the same precipitate must be mixed with the suppurative unguent above described, and to be used till not only the tumour is dissolved, but even its roots are carried away. As the red precipitate causes extreme pain in the manner it is commonly used, like the other causticks, I expressly advise to pass the precipitate thro' plantain-water drawn by expression, which may be done in the following manner: Put the whole into a vaporatory, evaporate by a soft fire to dryness; repeat this process a second time, then you may use it; it will eat away without causing much pain. If in spite of all these precautions, and this treatment, these callosities come to be skinned over, and to cicatrize, and if they subsist still, we must necessarily fall to the use of our anti-venereal remedies, our spirit of mercury, and our quintessence of viper; nothing can stand before these remedies, every symptom will vanish, and we may be assured of a radical and permanent cure.

During the course of this disease, the patient must be purged every five days with our aurifick pills; the regimen should be moistening and inspissating; marshmallow root, lintseed, rice, and cleansed barley, are very fit for making ptisans, to be slightly charged with these matters. We must observe the same precautions in the aliments as prescribed in treating on other diseases, which I shall forbear repeating.



*The admirable and infallible water for the gangrene and every kind of ulcer.*

Take fifteen pints of equinoctial rain-water well purified, that is, filtred through grey paper; after putrefaction and clarification, put this water into a large earthen pot, or rather, if you can conveniently, into a tin vessel; throw into this water six pounds of quicklime, made of good rock stone or flints, let it slack well by a slow and natural ebullition, without any agitation; and when the ebullition and action are over, you must add three ounces of arsenick in powder, and an ounce and an half of mastick well picked, and also in powder; stir the whole with a stick, for promoting the mixture and solution: then let the matters settle, and when the water floating a-top is perfectly clear, decant it softly, so as not to muddy the water, into a stone pot, and filtering the portion of water which is at the bottom, and which cannot be very clear, add to all this clear water three ounces of corrosive sublimate, nine ounces of alcoholised spirit of wine, and two drams of spirit of vitriol well dephlegmated. Put up this mixture of water, sublimate and spirit of vitriol, without allowing them to settle; that is, the water being muddy, in glass bottles well stopped, to be kept for use. When you would use this water, either for the gangrene, or for ulcers, you must shake it in the bottle, in order to muddy it, and to unite to it

what is deposited at the bottom. It is applied on the ailing part with compresses and bolsters of lint dipt in the said water.

If you would use this remedy for any ulcer in the eyes and parts extremely delicate, you must not shake the bottle, nor muddy the water; on the contrary, filtre it well, to leave no mixt residue or sediment therein; besides, you must sweeten and temper it with the water of plantain juice, or with that of the greater celidony, or with the pure water of alum.

## C H A P. V.

*Of the diseases depending on venereal shankers, or supervening upon shankers, as phimosis and paraphimosis.*

**A**LL the symptoms of the pox are grievous and extremely dangerous, or may become such, either by their natural malignity, or through the fault of having neglected applying at first the proper salutary remedies, or which is worse, of having employed bad ones, which heighten the distemper instead of curing it.

Tho' in the preceding chapter we have treated of venereal shankers, and given the means and remedies for their cure; yet as these very shankers often bring after them, and cause other diseases complicated with them, and inflame their atrocity, which is the case when these shankers occupy the internal



ternal surface of the preputium or frenum, or the surface of the glans or corona, or are numerous, confluent, malignant, painful, or too much irritated by the abusive use of violent escharoticks. It hence happens that the disease advances in growth, and that the preputium or glans, or both together, are at once enlarged and tumified.

They are then often hot, painful, ruddy, resist a little the impressiion of the finger, but recover readily upon ceasing the pressure; and then it is a phlegmonick tumour.

When neither hot, nor painful, nor ruddy, but as it were transparent, and full of serosities, they easily yield to the impressiion of the finger, and long retain the dent; and then it is an œdematous tumour.

Lastly, without being either hot, or painful, or ruddy, if they are hard, resist the pressure of the finger, 'tis a scirrhus tumour.

But whatever may be the cause of the tumour of the preputium, it sometimes happens that it covers, and envelops so tightly the glans, that it cannot be retracted to uncover it, and this case is in Greek called *phimosis*; that is to say, ligature. At other times it happens, that it is shrivelled and folded up behind the corona of the glans, embracing it so tightly, as in no manner to be pulled forwards to cover the glans; and this case, which is contrary to the preceding, is, in the same tongue, called *paraphimosis*, that is to say, posterior ligature.

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Whatever too be the cause of the tumour of the glans, if the obstruction of the glans be considerable and of a long standing, there is very often formed upon its surface, which is uncovered in the paraphimosis, or upon the edge of the preputium, which covers the glans in the phimosis, hydatides, or watery blisters, called *crystalli*, full of a thin or thick lymph, limpid or reddish, opake or transparent, unmixt or mixt with air, all different in number, bigness, and eminence, which occupy sometimes the extremity of the glans, sometimes the corona, sometimes the upper part, sometimes the sides; and which even sometimes in the phimosis and paraphimosis, appear upon the preputium itself, or the *frenum*.

Women as well as men are subject to these symptoms, but with the necessary and proper differences.

For, 1. The labia, the *nymphæ*, the clitoris, its preputium, and the *carunculi myrtiformes*, which shut the entry of the vagina, being eaten away by malignant shankers, grow big, and tumefy like the preputium or glans in men; and the tumour resulting from it, is in like manner phlegmonick, œdematous, or scirrhus.

2. The malignant shankers occupying the *carunculi myrtiformes*, or the entry of the vagina, cause a considerable straitening of that passage, which may be justly called *phimosis*.



3. There also sometimes arise, on the surface of these tumefied parts, hydatides or blisters full of water, and resembling in their figure, their nature, and quality, the crySTALLI in men.

4. Something like this happens to sodomitical persons, when by their abominations they contract malignant ulcers in the anus, which by straitening that part, produce there a phimosis, with inflammation of the extremity of the rectum.

In fine, when nurses have come by harm by suckling, and to have cancers at the bottom of the nipples, the extremities of the nipples are tumefied considerably, whilst at their bottom there is an unnatural constriction.

The cause of these symptoms, according to M. Astruc, proceeds from what the arteries convey to the glans or preputium, as they do to all the other parts of the body, viz. two sorts of liquors mixed together, blood and lymph, by the lymphatick vessels; whilst these liquors return in the same quantity they came, the preputium and glans retain their force and natural flexibility; but if by any cause whatever, there return less than there came to the part, it is plain that in that case, the glans and preputium will be swelled, and grow big in proportion to the quantity of the liquid retained.

Now two causes may render the quantity of blood and lymph, which come from the  
glans

glans and preputium, less than what comes to them, and these causes are common to all the parts of the body. The first, if the quantity of liquids which return from them be less, and the quantity which comes to them remain the same. The second, if the quantity of liquids which returns continuing the same, the quantity that comes to them be found encreased.

The first case happens when the diameter of the vessels, which carry back the blood or lymph, are straitened: this straitness arises from two causes.

1. From the compression of the vessels by indurated, callous, and confluent ulcers which lie near them. From this it comes, that the numerous, hard and callous shankers, which are placed near the large branches of the veins or lymphatick vessels, often give occasion to the inflation of the glans or preputium, by compressing these vessels, and hindering the return of the blood and lymph.

2. From the constriction induced on these vessels by the spasmodick contraction of the tendinous or muscular fibres of the glans or preputium which encompass them. From hence it comes that the shankers, which are very painful naturally, and made such by the application of cathetericks, by giving occasion to the convulsive contraction of the fibres, often bring upon the glans or preputium a surcharge of blood or lymph, which makes them swell.

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The second case happens, when the blood and lymph, being unable to distribute themselves in the usual manner into the neighbouring parts, are forced in greater quantity upon the collateral vessels, which terminate in the glans or preputium; which always happens when one or other of these parts is inflamed; for as the glans and preputium receive the blood by the branches of common arteries, which arise from the external artery of the pudenda, if it happens that the blood of the trunk of the common artery cannot pass into the branches terminating in the glans, by reason of the inflammation which holds them obstructed, it will be forced to enter the collateral branches going to the preputium; and this surplus of blood, which arrives all at once, will cause the phlogosis or inflammation of the preputium: in the same manner also, if the blood of the trunk of the artery cannot be distributed into the preputium as before; because it is already inflamed, it will entirely fall upon the glans, and consequently inflame it. From this it comes that the inflammation will communicate itself so easily from the glans to the preputium, and back again from the preputium to the glans; that it is very rare that one of these parts is inflamed and not the other.

It is by a like way of reasoning, equally solid as ingenious, that this author establishes his hypothesis: we cannot do better than refer to his learned writings; and being persuaded

suaded I should, in this respect, only glean after him, I readily confine myself to remedies, and the cure of these diseases.

But we cannot dissemble. These remedies, and the cure of these diseases, are very difficult ; when these last are arrived to a certain pitch of malignity, and complication, and the patients are cachectick, consequently, the cure depending on the knowledge of the cause of the disease, both antecedent and conjoined, on the actual state of the patient, and the remedies to be administered, and the manner how.

Tho' we have illustrated both these cases in the preceding chapter, in treating of venereal shankers, and indicated the proper remedies to effect a radical cure ; and tho' the phimosis and paraphimosis of which we treat here, be the conjoint cause ; yet we think it necessary to make some new reflections upon this subject.

It is certain that shankers require to their cure internal anti-venereals ; and thus, after the use of these remedies and purgatives, the business is to cauterize the shankers with proper remedies, and afterwards bring them to suppuration, deterge and desiccate them.

But the difficulty and important affair is, to know what those proper, useful, and salutary remedies are ; for we must cauterize certain sorts of shankers with certain causticks, and others with others : it is certain, and there is no room to doubt of it, that all  
violent



violent causticks, such as the precipitate, the lapis infernalis, are apt to irritate, and cause fatal symptoms to those who have a phimosis or paraphimosis at the same time, which are nothing other than inflammations of the glans and preputium, which cause, as was already said, the glans to be covered without being able to be uncovered, or bare and uncovered, without being able to be covered: often the hardness or callosity of the shanker contributes much to these symptoms; at other times this happens from the acrimony of the calcined salt, which gives rise to the ulcers, or to the plenty of the matter which suppurates. And lastly, it also proceeds very often from wens or nodes, which hinder the uncovering of the glans.

And thus instead of causticks, in the case of a phimosis and paraphimosis, and consequently an inflammation, we must have recourse to fomentations, emollients, and anodynes: but what is worse, and harder still, is, that not having made a good choice of external and internal remedies, by this means the inflammation, or strangling of the phimosis or paraphimosis, becomes considerable, and unhappily remedies act not readily, and we are put upon the hard necessity of making some small incisions on the skin of the preputium, in order afterwards to reduce it with the more ease; operations ever painful, and very often dangerous, because the irritation of the spirits puts the fibres into convulsive motions,

motions, shrivels them up, and confines the circulation, augments the fluxion and inflammation, and thereby brings on a gangrene; and then often, in spite of all our precautions, and the use of remedies, in order to avoid the progress and consequences of this fatal disease, life itself falls a sacrifice amidst the most dreadful agonies.

And thus we should be sensible, from what I have just said, of what importance it is to obviate all these uneasy symptoms, which they may come to be, if use is not made of the anti-venereals I have indicated for the cure of the universal pox, our quintessence of viper, our water for a gangrene, and, finally, our solar balsam, to be externally applied upon the ulcer: but, above all, choice should be made of a good physician or surgeon, for the direction and conduct of these diseases, and the administration of the proper remedies, and not imprudently give up ourselves to the management of quacks, who often, and almost ever, far from effecting a cure, heighten the disease, either through ignorance, or the use of their remedies.

## C H A P. VI.

### *Of venereal bubo's.*

**I**F it is essential and necessary, in order to treat diseases well, and arrive at their cure, to have a precise notion of them, and not to confound them with other diseases, and to administer



administer for each the proper remedies ; it is so much the more necessary still, in the cure of the disease we are about to treat on.

Ignorance, in this case, commonly causes fatal symptoms, and this ignorance is of different species ; one makes use of remedies improper, weak, without force or energy, and brings on an universal pox : another, on the contrary, employing violent remedies, would imagine a cure to be unworthy of him, if not attended with a course of operations and incisions, which, being almost ever made unseasonably, carry off the patient amidst the most cruel agonies : this open exposure will be but too applicable in the recital we are going to make of the usual treatment of this disease.

The venereal bubo is distinguished from other tumours from its precise place in the groin, without shifting it ; and lastly, from its being unattended with any of the symptoms of hernia's, pestilential bubo's, scrophula's, or from its being produced in the act of depuration of the mass of blood.

It is pretty difficult to determine the antecedent cause of the bubo, or at least assign a reason why, in an impure commerce, that of many men, who have had communication with the same tainted women, one is taken with a heat of urine, another with a shanker, a third with a bubo, and a fourth with an universal pox.

This doubtless depends on the different constitution of each of these men ; but this

is somewhat too vague ; we may, therefore, add, that when the pocky ferment, which is lodged in the vagina, is very volatile, and the canal of the penis sufficiently large, this ferment being excited by the congress or copulation, has such force as to penetrate even to the prostate glands, there to produce that disposition which causes heat of urine : yet sometimes it is still more volatile, and penetrates into the mass of blood, where it causes an universal pox ; or if the heat be sufficiently strong to expel the venom critically, the matter being carried into the groin, there comes on a bubo ; but if the pocky ferment be less subtil, it stops in the external parts of the penis, and causes shankers. But whatever be the case as to all these causes, which may be contradicted, and which we shall be obliged to mention more particularly, let us enter into a circumstantial detail, that may be useful for the cure of the disease.

A bubo is an inflammatory, hard, oval, and more or less painful swelling, which usually comes but slowly to a suppuration ; its seat lies in the conglobate glands of the groin, sometimes in the glands of the armpits, and sometimes, which is an extraordinary case, according to Zacutus Lusitanus, and M. Astruc, in the neck, on the sides of the lower jaw, and other parts of the body, or at least swellings like the bubo's in the groin, seeing they come on in the same manner, have the same symptoms, and are cured  
by



by the same remedies, and arise from the same cause, namely, a pocky virus of an old standing, or lately contracted.

This swelling often comes but in one groin, or one arm-pit, or sometimes in both, according to the copiousness of the virus, which at the same time attacks both sides, or according to the disposition of the glands to receive and to stop it; or according as these glands are more or less compressed by the position of the patient, or by some other external cause.

The bubo is at first small, close, hard, and somewhat painful, especially when one walks, if it be situated in the groin; it grows faster or slower, without the colour of the skin changing; it sometimes begins in several glands, which, swelling, unite together, and form only one tumour: at length it becomes as big as a pigeon's or a hen's egg, and even bigger. The pain encreases by little and little, and becomes so great, that the patient cannot walk; and therein he feels a burning heat, and a strong pulse, which continue till a suppuration happen, unless the bubo terminate in a resolution, which is very rarely the case when it has come to that height.

Tho' a bubo in general be a phlegmonick swelling, there are some which are hard, but somewhat painful, and but little disposed to suppurate, and which are of the nature of a scirrhus: there are others which are outwardly soft, have but little heat, pain, and

pulse, yield to the touch, and retain the dint of the finger, and seem to partake of the nature of an œdema.

Bubo's are either essential or symptomatick ; the essential are such as immediately proceed from a foul venereal commerce, whose venom communicates itself to the glands, by means of the natural parts, before it is carried into the mass of blood. The symptomatick are such as come on after the pox, whose virus being got into the blood, communicates itself to the glands of the groin, arm-pits, or other parts, by the way of the circulation.

*The causes of a venereal bubo.*

There are several causes which give birth to bubo's ; we will only assign such as are the most essential. The general cause is the thickness of the lymph, occasioned by a pocky virus, which being of a saline and acid nature, is very much adapted to coagulate the humours : this virus communicates itself, as we have already said, to the glands of the groin or arm-pits, through the lymphatick vessels which open into them in the time of coition. It may insinuate itself into the urethra, or spread itself upon the glans and penis in men, or the vulva or vagina in women ; penetrate in both sexes into the substance of the natural parts, whose pores, and mouths of their excretory ducts, are at that time very open, and so enter the lymphatick vessels.



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As the pocky virus, which is the antecedent cause of the bubo, is by its nature very acid and acrid, and as it exhales some of the pus which issues out of the virulent ulcers, with which the genitals of women are infected, and which being received into the urethra of a man who meddles with them, penetrates into the coats of the blood-vessels in this canal, and so mixes with the mass of blood.

Because, as I have already said, in coition the pores of the urinary canal, as well as all those of the genital parts, being very open, the malignant vapour which arises from the ulcers, penetrates into them easily; and that the particles of these bad exhalations being introduced into the blood-vessels, they, by means of the circulation, reach to the capillaries, which entangle them in the coats of the glands in the groin, where they stop, coagulate, and form an aposthem, which is called a venereal bubo.

This aposthem is formed between the coats that envelope the glands: there likewise happen bubo's by the sudden stopping of a virulent gonorrhœa, when this stopping has not been brought about by the use of any remedy capable of repelling, and, by that means, destroying the venom: so that, from the time that the gonorrhœa is stopped, or runs but very little, the prostatae, the seminal vesicles, Cowper's glands, and the testes in men; the prostatae, Cowper's glands, and the vaginal glands

glands in women, are full of a virulent semen, always impregnated with an acid salt; so that the particles which exhale from thence, must mix with the lymph which flows back from these reservoirs, or from the neighbouring parts, as the scrotum or perinæum in men, the perinæum and vulva in women; must be thrown with this lymph into the glands in the groin, and therein soon cause bubo's, unless a quick discharge be made of this confined semen.

It may likewise happen, that by means of the shankers in the penis or vulva, the lymph which flows back from these ulcerated parts, being filled with several drops of a virulent pus, may transmit itself to the glands in the groin; these purulent drops may thicken the lymph, stop up the glands that contain it, and occasion bubo's.

It likewise falls out, that in a latent pox, the semen of the testes, prostatae, seminal vesicles, Cowper's glands, and vaginal glands in women, which is infected with the pocky virus, communicates the infection to the lymph of these reservoirs, and to the neighbouring parts; from whence it must be carried into the conglobate glands of the groin, and therein exert its efficacy, and produce bubo's.

But from whatever cause bubo's proceed, whether from a foul venereal commerce, or a gonorrhœa stopp'd, or which runs but very little; or from shankers, or a latent pox, if  
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the lymph be found equally infected in both groins; and that moreover every thing be equal on both hands, there will then be bubo's on each side; whereas there will be but a bubo on one side, if there happen any inequality.

We have explained, as much as we could, the origin, and antecedent, and concurrent cause of bubo's; but we have still other things to clear up, which are of no less importance, which regard the knowledge of the nature of the bubo, and the cure of this malady, things very essential; the want of knowing which has, in all ages, and in all countries, given occasion to several famous authors to cry out against the ignorance of surgeons who have undertaken the cure of this disease without knowing it, and thereby confounded, by a blameable unskilfulness, the hernia with the bubo, made incisions, and by that means killed, not without extreme pains, such patients as were so weak as to put themselves under their care.

Musitanus, a very able physician of Naples, complains bitterly of the ignorance of the surgeons in his time, and of the roguery and bad management that prevailed among some people, unworthy to practice so noble a profession, by the abuse which they made of their rank, and of the credulity of the publick, and likewise of their hacking operations.

Devaux, his commentator, also a very able surgeon of Paris, makes the like complaints;

he characterizes these surgeons as ignorant and bloody men<sup>a</sup>: he goes farther, and gives tragical examples both of this ignorance, and of the roguery of some of his fraternity.

But, thank God, we are fallen in times of greater light, the clouds are dissipated, there have arisen admirable men among us, who by their zeal and knowledge have cleared up this matter, so as not to be liable to any more mistakes. Such is M. Astruc, in his treatise of venereal diseases, where this part is handled with force and elegance, and in so methodical a way, that he leaves nothing farther to be desired on this head; wherefore I will, with pleasure, give an account of this method.

*Symptoms of the bubo.*

1. The lymph thickened by the pocky virus, must needs stop in the glands of the groin, on account of the great number of little cells which there retard its course, and must therein cause a slight swelling.

2. In proportion as these glands come to be swelled by the detention of the lymph, they must become painful on account of that detention. The degree of pain which one feels therein, must answer to the degree of readiness in the swelling.

3. One cannot walk but with pain, and consequently not without difficulty; because the musculi flexores of the thigh, which  
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<sup>a</sup> See Archagatus, t. 4. p. 148.



ought to contract, in order to walk, cannot do so without compressing the glands of the groin which are swelled up, and causing pain therein.

4. The lymph which flows and gathers together in these glands, must choak and swell them up also more and more, till it can dilate them no farther ; so that the bubo must encrease and harden more and more every day, and that according to its different bigness, to the utmost extent of the glands which it occupies, or the degree of force with which the lymph flows thither ; and must rise to a sharp head outwardly, or extend itself obliquely, according to the situation of these glands.

5. As the blood-vessels, which traverse the substance of the swelled gland, are compressed all at once, the blood must be obliged to remain therein, till it has by degrees opened itself a new passage ; and from thence arises, at least, in the beginning, the heat which is felt in the bubo.

6. If it happen that the rapid progress of the swelling caused by way of fluxion, should suddenly stop the course of the blood ; if the arteries beat strongly, either on account of the natural constitution of the body, or on account of the fever which shall come on ; if the blood, naturally hot and boiling, comes to be rarified considerably ; in these cases there will happen an irruption of the blood into the lateral lymphaticks, which will cause

a real inflammation, and then the bubo will be attended with heat, pain, pulsation, and hardness.

7. Yet as the blood-vessels, in the skin which covers the bubo, are compressed but little or none at all, the circulation will continue to be performed almost as freely as usual: thus the skin will not be enflamed, and even will not change colour, or but very little.

8. If the swelling grows slowly, if the pulse of the arteries be weak and slow, if the blood be naturally aqueous and diluted, it will flow but weakly and slowly into the vessels of the gland that is surcharged; and it will be surcharged the less in this case, as it will not continue at all in the neighbouring vessels, or but in little quantity; so that it will only cause a heat, pain, and a moderate pulse; even often, in dilating its vessels by little and little, or opening new ways, it will take a new course of circulation, only leaving in the substance of the bubo, or at least in the neighbouring parts, something of the serous matter or lymph with which it is surcharged. Thus the bubo will then be œdematous; that is to say, the heat, pain, pulse, and hardness, will be moderate therein; it will easily yield to the impression of the finger, and retain the dint some time.

9. If the thick and very dry blood yield a lymph of the same quality, and if this lymph gather but slowly, and by way of congestion in  
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the glands of the groin, the bubo will then become scirrhus, that is to say, it will be hard and renitent, because the lymph which causes it will naturally be thick, and it will have time to harden in the part, and be without heat, pain, and pulse, because the blood will not continue around it, on account of the congestion being performed but slowly; the neighbouring vessels, which are compressed, will have time to dilate by degrees, and so recover what the compression has taken from them.

10. The phlegmonick or inflammatory bubo resolves easily and entirely; for on one hand the blood, which contributes to cause it by its stay, easily enters again of itself into the course of the circulation; and on the other hand, the lymph, which stays in the glands, always retains fluidity enough to resume its course, either on account of the heat of the part, or of the oscillation of the arteries, which in this kind of swelling are somewhat considerable.

11. At least if this bubo cannot resolve, has it not some difficulty to suppurate? For on one hand, the blood is, by its natural constitution, easily susceptible of a fermentative suppuration; and on the other, the lymph therein is easily disposed by the strong heat which agitates it, and the violent pulsation of the arteries which breaks it.

12. The œdematous bubo easily resolves, because the serous matter, which superabounds in the vessels that surround the swelling,

ling, resumes with facility enough the usual road of the circulation; but this resolution is imperfect, because the thicker lymph with which the gland is choaked up, can neither be kept dissolved, for want of heat, nor comminuted and pushed forward into its vessels, for want of a sufficient oscillation in the artery: so that there often remains in this bubo a kind of hard kernel, difficult to be resolved.

13. For the same reasons this bubo suppurates with difficulty; for the lymph being thick and void of saline and active particles, is by its nature but little adapted for suppuration; besides that, there is not a sufficient degree of heat, nor a sufficiently strong oscillation of the arteries to cause it.

Finally, the scirrhus bubo cannot resolve nor suppurate, but with difficulty; and commonly it does but harden more and more every day, which is owing as much to the grossness, thickness, and viscous quality of the lymph that is stopped in the little cells of the glands, as to want of heat, and pulsation in the arteries.

*The diagnostick and prognostick.*

*Diagnostick.* Venereal bubo's resemble the simple, pestilential, scorbutick, and scrophulous ones, in their situation and figure; but it is an easy matter to distinguish them from these sorts of bubo's by particular signs. For, 1. In simple and pestilential bubo's the skin is red and enflamed, which does not happen in venereal bubo's.



bubo's. 2. Scorbutick, or scrophulous bubo's, are attended with evident signs of the king's-evil or scurvy. 3. Venereal bubo's are still more certainly distinguished from all the others, by the account of the patients who agree in a foul, venereal, or suspected intercourse, or who aver that they have a gonorrhœa or shankers, or who shew an evident proof of a pocky virus that lies concealed in the blood.

Though venereal bubo's have less resemblance to the bubonocèle, or hernia in the groin, however they are sometimes confounded together; not indeed with the hernia formed by the epiploon, and for that reason called epiplocele, the swelling in which is somewhat soft: but with that which is caused by the intestine, and which is denominated enterocèle, which being more hard, comes nearer to the nature of the bubo; but yet it is not with that enterocèle, where the intestine slips through the rings of the muscoli epigastrici, because the place where the intestine falls, and where the swelling is formed, is too remote from the glands of the groin, and consequently from the seat of the bubo: but with that other enterocèle, where the intestine falls into the groin in following the course of the crural vessels, which pass under the arch of the muscles of the lower belly; because this enterocèle occupies, as near as may be, the same places  
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with the glands of the groin, and the bubo's which they form.

But of whatever kind the hernia be, it is an easy matter to distinguish it from the bubo, by the following signs:

1. The surface of the enterocele is smooth, the figure almost round, and though its volume be considerable, its base, which is very narrow, answers to the opening thro' which the intestine passes, and serves the swelling for a pedicle; whereas the surface of the bubo is uneven, its figure most frequently oblong, and its base broader.

2. The swelling in the enterocele easily yields to pression, but rises again when the finger is taken away; but it is quite the reverse in the bubo; for that which is inflammatory, or scirrhus, resists pression, and that which is œdematous or suppurated, retains the dint of the finger it has once received.

3. In touching the enterocele, which is easily compressed, and rises again readily, it is well known that the whole swelling contains flatus's, which are either alone, or mix'd with some liquid matter. In bubo's, on the contrary, there are no flatus's; and if an obscure fluctuation discover therein some liquid matter, it is in small quantity, situated low, and only occupies the middle of the swelling, as happens in the bubo that suppurates.

4. The enterocele causes troublesome symptoms, to wit, a fever, colick pains, suppression of stools, vomiting of the feces, and the



iliack passion ; whereas the bubo never causes any thing like this.

Moreover, it rarely happens that a foul, venereal, or suspected commerce, capable of causing a bubo, should so exactly coincide with a fall, and a blow in the belly, which can occasion an enterocele, that after a careful examination, one can be in any doubt as to the nature and cause of a swelling which is in the groin.

When once a person is well assured that there is a bubo, it is an easy matter to distinguish the differences, by the signs which have been mentioned in the description of this swelling : for if the pain, heat, pulse, and hardness, be very great therein, it is evidently an inflammatory bubo ; if all these symptoms be but moderate, and even if the swelling be soft, and if in pressing it the dint of the finger remain therein, it is an œdematous bubo. Lastly, if there be but little heat, pain, and pulse, but a great deal of hardness, it is a scirrhus bubo.

The causes of bubo's are discovered by the account of patients, or by knowing what has preceded the disorder ; whence it is judged, if the venom has communicated itself to the glands in the groin, by a foul venereal commerce, or by a gonorrhœa that is stopped, or that does not run enough, or by shankers in the penis, or a concealed pox.

*Prognostick.* A bubo is without any danger, provided it be treated as it ought; nevertheless it is a considerable malady, because it always requires a great deal of care, and a good many remedies.

We may however look on a bubo as dangerous, in that it often causes the pox, if we neglect to evacuate by suppuration, when it cannot be avoided, and by repeated purges, the virus which has penetrated into the body; and to correct, by specifick remedies, whatever may remain of it in the blood.

The bubo which proceeds from a foul venereal commerce, from a gonorrhœa that has been stopped, or from that which does not run sufficiently, or even from shankers in the penis, is not so dangerous as that which proceeds from a latent pox: the first depends on a fresh contracted venom, which not having yet infected the blood, may be evacuated or corrected: the second depends on a venom of an old standing, which has entirely corrupted the mass of blood.

The inflammatory bubo is easier to cure than the œdematous, and especially the scirrhous sort. The first may terminate in a little time by re-solution or suppuration; the other two commonly end in a true scirrhous, which does not yield to ordinary remedies; and they may become cancerous.



*The cure.*

We ought to distinguish three different cases for the treatment of a bubo, namely, the first, when the bubo comes on without any evident cause; the second, when it is joined with a virulent gonorrhœa, or with shankers in the penis; the third, when it happens alone, and soon after a foul venereal commerce.

In the first case, as the bubo indicates a latent pox, recourse must, without delay, be had, in order to cure radically the one and the other disease, to administering my remedies which I have given for treating the universal pox. In the second case, the same remedies should likewise be employed according to the same method, adding thereto such as are proper for the gonorrhœa and shankers, which we have likewise given, in order to cure all, at the same time, these different diseases. Lastly, in the third case, the only care should be to endeavour to destroy, or evacuate, so perfectly the virus, that there may remain nothing of it in the blood, that may either renew the disease, or cause an universal pox.

Those that pass for the most experienced, are divided among themselves, and follow two different methods. The first method lies in resolving the bubo by the use of mercurials and purgatives, without applying ripening medicines, and making them suppurate: the

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other

other tends to procure a suppuration of the bubo, by joining the external application of ripeners to the internal use of mercurials, in order to combat the virus with more success.

It is surprising that people can be divided upon such a subject, and that there can be two different opinions about it : since it is agreed, that this malady may be cured by internal remedies ; and since it must likewise be agreed, that the operations are always painful, equivocal, and very often fatal. Thus this method should never be used, unless the physician be prevented by a suppuration of the bubo, and then indeed one cannot dispense with following this indication step by step. In this case are ripeners to be used, emollients, anodynes, and suppuratives, which we have indicated in the treatment of shankers, as the best and most excellent remedies that can be made use of, following as an express, essential, and indispensable condition, the internal remedies according to my method ; to which I add the topical one that follows, as a sovereign remedy for all scirrhus tumours, particularly the bubo of this kind.

Take of sal armoniac, sublimated three or four times with common salt decrepitated and perfectly purified, as we have shewn already, an ounce ; flowers of salt of human urine, half an ounce ; aqua vitæ rectified and pass'd thro' salt of tartar, an ounce : mix the whole in a glass bottle, which you must shake and stir very well, and for some time, till it be

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thick,



thick, and brought to the form and consistence of wool-flocks. You must anoint therewith the part affected four times a-day, and put over it a plaister of gum ammoniac dissolved in spirits of wine.

If the bubo be phlegmonick, blood must be let twice during the cure; if œdematous, or scirrhus, one bleeding will be sufficient; yet nevertheless the whole, according to the case and circumstances, which ought to regulate every thing, as I have said already very often, without intending to adopt thereby the prejudices of the ancients on this head, who were afraid of using bleeding in the treatment of a bubo, because they imagined that it would draw the venom inwardly, and cause an universal pox.

I shall conclude this chapter with this reflection: mercurial frictions, in the treatment of a bubo, however well managed they be, are always useless, and may be fatal in procuring a salivation, how prudent soever the precautions be that are taken; the most prejudiced in favour of this method agree in that opinion.

It is undoubtedly this that makes a great many practitioners, in order to avoid these frictions, and the danger of salivations, to make use of the method of suppuration, which draws after it that of cutting the bubo, another desperate, painful, and very dangerous method; whereas in using my method, one is assured not only of rooting out the

venom, by destroying the antecedent and concurring cause, but of perfectly purifying the mass of blood, without fear of any accidents, and avoiding, even by this means, all other diseases. The remedies in this method, are quick, efficacious, and agreeable.

## C H A P. VII.

*Of the king's-evil.*

**I**F we ought to detest and abhor the crime, we ought at the same time to love and pity the criminal, and in his misfortune lend him our assistance. If this be a general rule with which we cannot refuse complying, without becoming ourselves culpable, what do we not owe to unhappy innocent persons, who have become victims to the crimes of others, against whom it is even forbidden them, by the law and by nature, to utter any complaints, or any reproaches?

Such however is the sad case of the greatest part of young people afflicted with the king's-evil; a case with which I have been touch'd to the quick, at the sight of these poor unhappy persons, justly objects of anguish and pain in themselves, and unjustly objects of contempt and reproach in others; covered with sores and scars, which they cannot conceal, and which cut them off in the flower of their age, in the midst of loathsomeness, and the most dreadful agonies.

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This cruel disease has obliged me to make serious reflections, on one hand, upon the melancholy situation of these poor unhappy persons, which incessantly returned to my mind; on the other hand, upon the certain knowledge I have of physick, the great number of able physicians who have treated of this disease, and the great number of specifick remedies for all sorts of maladies, and yet the small number of radical cures performed, I own that these different reflections have often ruffled and disturbed my repose; my zeal has been heightened to such a pitch, that I have laboured indefatigably, for a very long time, and with a great deal of application, in order to find out a remedy which had sufficient force, energy, and efficacy to destroy and root out the original and antecedent cause of this disease, being persuaded, that the external consequent causes may be easily cured by the common remedies.

My labour has not proved in vain; I have found out this remedy, and I give it the publick, together with a sure method for treating and curing this cruel disorder, which I submit to the judgment of the greatest critics, being even ready, notwithstanding the experience and happy success which I have had, to receive their advice with pleasure.

As I could not arrive at the discovery of those happy specificks, but by an examen and knowledge of the qualities and virtues which the remedy ought to have, when com-

pared with the different characters of the disease, which I undertook to encounter and destroy ; and as it is from this combination that I have drawn fair consequences, I take myself to be obliged to communicate, at the same time, to the publick, my observations, that they may be benefited thereby, and that they may not unjustly presume that, like a quack, and at a venture, I give this remedy. I thought I owed to the publick, and to myself, that satisfaction. In order to do it with some method, and in an instructive manner, I will explain, 1. What the king's-evil is. 2. Its cause, origin, effects, and symptoms. 3. The different opinions of authors who have treated of the cure of this disease, with the most famous remedies that have been practised. 4. and lastly, I will show my own method, and my own specifick, and the principles upon which I found the one and the other.

Though the importance of the subject seems to require that we should enlarge somewhat more upon all these circumstances, than what I have done upon the other diseases which I have treated in this work, where I have confined myself to say only what was useful and absolutely necessary for their cure; being convinced of that maxim of the Latin Hippocrates, Celsus, book 1. *Morbos non eloquentiâ, sed remediis curari* ; i. e. that diseases are not to be cured by fine speeches, but by specifick remedies. I will continue  
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this treatise in the same strain, that is, with the same simplicity as usual, being sufficiently satisfied that I give excellent remedies.

The king's-evil has been differently defined or described by authors, according to their several notions and principles: these different opinions, no doubt, proceed from this, that every one is not equally skilled in anatomy, and particularly in chemistry, which is the key to the knowledge of physick, and that all have not their genius turned the same way: so that we must not be surprized, if people speak differently of the same things, there being so many different ways of determining in physick, and so many different appearances by which one may examine them, that one would never have done, were each subject to be canvassed with the utmost exactness, and were an account to be given of all the different sentiments that have been published; and it lies upon the prudence of the physician, to confine himself to such things only as can lead him, with more certainty, to the means of knowing the diseases of the human body, and to so much as is necessary to apply thereto a speedy remedy, without affecting long dissertations, which very often, instead of clearing up the matter, embarrass and darken it, and so put the reader out of a condition of being able to reap any benefit; and often one cannot, after the perusal of these long discourses, conclude any thing else, than that it is the production of a

scholar, who may understand himself, but whom no body else can ; this I say in general, without a design of making any particular application.

Galenists consider the king's-evil as an anti-natural tumour, which comes on, say they, in the endurated glands, and which is caused by a saline and corrupted pituita or phlegm ; an humour which the ancients pretended was one of the four parts which they believed constituted the blood ; which pituitous humour makes these glands swell, and stretch the membranes where it begins, as if it were a lump of live flesh : and as commonly these doctors differ amongst themselves, the opinion the most received at this day, and which has most likelihood, and most conformity with principles and experience, is, that it is a thick, acrimonious lymph, which gives occasion to this disease, by its stagnating and corrupting in the conglobate glands.

Chemists, who always agree amongst themselves, and who are more thoroughly acquainted with nature, are of the same opinion with Paracelsus, who defined the king's-evil in general, tumours indurated by a nitrous, excrementitious, corrupted salt, which swells the glands, and heaves them still more and more, as may be seen in preparing sal nitre, which is formed into such like figures as small sticks adhering together.



All this, on one side and the other, deserves some explanation, in order to arrive at a perfect knowledge of it. Before I enter into this detail, I shall premise two observations: the first, that though both these definitions seem very much to differ, they are however, so to say, two roads that lead to the same end: the second, that though several celebrated authors have treated of the cure of this disease, as Andr. Dulaurent, first physician to Henry IV. Dubois, an able surgeon of Paris, and others: yet no one has thoroughly explained himself, as some physicians in our days have done. One will find the opinion of these gentlemen expressed in their writings with elegance, force, beauty, and precision; one will see therein great industry and learning; their descriptions are lively, very sensible, and very striking; the diagnostic and prognostic symptoms are very fully enumerated; and lastly, the remedies proposed therein for the cure, are laid down in order, number, and seeming efficacy. Happy for the publick were it really so!

*The description of the king's-evil.*

The king's-evil, commonly called struma, scrophula, is a scirrhus, hard, and frequently indolent tumour, which is formed by degrees in the conglobate glands, especially in those of the neck, groin, arm-pits, hams, arms, and wrists: it is called scrophula from the latin scropha, a sow, because this animal is  
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subject to such tumours under the throat. Among scrophulous maladies are likewise reckoned those cold tumours which are formed in the joints, and upon the bones, as the feet, knees, elbows, hands, and particularly the fingers; so that the greatest part of obstinate defluxions, which fall by degrees upon the joints, without any manifest cause, and which are followed by an abscess, a caries, and swelling in the bones, especially in the apophyses and epiphyses. Of this number is also the œdema, which causes an insensible swelling in the arms, feet, and legs, chiefly towards the joints; the particular œdema, whose cause does not consist in a serous lymph which relaxes the parts, but in a kind of jelly or thick lymph, which distends them extremely, without retaining the dint of the finger; sometimes the œdematous tumour lies in the knee, which swells gradually with a redness, a heat, and pain, whilst the leg and thigh become very much extenuated, and the whole body is wasted by a slow fever. In fine, fistulous ulcers, the rickets, the cancer, the bronchocele, and several other diseases, likewise depend very often upon a scrophulous virus, as we shall shew in the sequel.

The king's-evil is favourable or malignant, according to the acrimony of the salt with which the lymph, that serves it as a vehicle, is impregnated; and it is properly this salt, which is the efficient cause of these maladies;  
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the favourable sort lasts often very long, without causing any troublesome accident, and sometimes yields to common remedies without much ado; the malignant sort is of the nature of a cancer, and hitherto it has been commonly looked upon as incurable; the glands of the neck, and other external parts, are not the only places that are attacked by this disorder; the glands of the mesentery are in like manner attacked, as is almost always confirmed upon opening such as have died of the king's-evil: oftentimes too the disease begins in this entrail; the spleen, the liver, the matrix, and several other internal parts, are likewise sometimes scrophulous. The nitrous salt, which is the cause of the king's-evil, may be produced in, and carried through all the parts of the body; the lymph which can dissolve it, and with which it is impregnated, and which serves it as a vehicle, circulates throughout the body to come at three different parts, namely, the head, the arms; and after having passed through a vast number of conglobate glands, goes to each side; the one empties into the jugular and subclavian veins, the other into the external and internal parts of the breast, and lodges it from time to time in the thoracick duct: the third, lastly, comes from the inferior parts, and from all the viscera of the lower belly, and throws itself into the receptacle of the chyle. What number of accidents, therefore, is not this lymph, impregnated with the salt that coagulates

coagulates it, capable of producing? seeing the number of glands and parts which it is obliged to traverse, is almost infinite; it therein produces fatal obstructions, and, given up to the effects of its malignant quality, sometimes obstructions in the glands of the neck, armpits, œsophagus, the trachæa, the groin and joints; at other times in the mesentery, the liver, the spleen, the matrix, the lungs, the brain, where it may cause scirrhus tumours, cancers, obstinate defluxions, dangerous squinancies, obstinate ophthalmia's, malignant abscesses, fistulous ulcers, mortal consumptions, terrible epilepsies, and several other chronical diseases, which will be only latent symptoms of this cruel malady.

I will confine myself to that explication which expresses the sentiment of the most celebrated authors, and which seems sufficient for following my plan, which is no other than to unfold the origin and the true causes, both internal and external, of this lamentable disease, and to give the most infallible, and most efficacious remedies, and at the same time the least dangerous for bringing about a perfect cure. Such as would desire a fuller treatise, may have this satisfaction in the works of the learned, which I have already mentioned. But the internal causes of this disease, do not seem to me to be traced near enough, nor with a sufficient degree of precision, because the vitiated humours which they pitch upon, are only, as  
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we have already said, the vehicle of the agent that produces this scirrhus or scrophulous tumour, and which, by its caustick quality, makes it degenerate into a malignant ulcer.

So that in order to be well understood, and to explain myself as to the true proximate and efficient cause of the particular species of ulcers, which is called the king's-evil, it is necessary to go a little higher, and to discover the antecedent cause of all the species of ulcers in general, that affect the different parts of the human body, in order from thence to determine what is the primary and true cause, and what the nature of the particular ulcer of which we are now treating.

The greatest part of physicians lay down, as the general cause of ulcers, the humours contained in the human body, which having acquired, either by means of the natural heat, or by means of an adventitious heat, or by means of some coagulating acid, a corrosive quality, and which being carried to the skin, there exert their malignant faculty, by corroding the parts; so that the difference which is found in the different sorts of ulcers, does proceed only from the diversity of the caustick humours that operate; but the humours, being only the vehicle for the corrosive agent, cannot be taken for the proper cause of ulcers; wherefore we ought to find out a more proximate and truer cause still.

This sole, proximate, efficient, antecedent, and internal cause of all the sorts of ulcers, with

which the human body can be attacked, seems to me to be no other than the proper salt of our natural balsam, which when separated from this balsam, is dried up and calcined, not only by its internal heat, but also by the heat of the part to which it is carried, or sometimes by the heat of some external agent. This salt acquires, by its calcination, a caustick quality, and a power of breaking the continuity of the parts to which it is carried thus altered; so that the proper salt of our natural balsam is the true, antecedent, internal, and efficient cause of all sorts of ulcers, the internal conjoint cause is this very salt, which being separated, dried, and calcined in some part of our bodies, corrodes it, breaks the continuity, and therein forms the ulcer.

With this sole, internal, antecedent cause, are commonly joined external causes: these are they that occasion the separation of the salt from its balsam, its desiccation, calcination, and consequently its malignant, caustick, and corrosive quality. The air, or the saline vapours of the sea, produce this effect, but in a speedier and more sensible manner, upon such persons as are not accustomed thereto, or such as are of a certain temperament; from thence proceed the scurvy, the itch, &c. aliments that abound with acrid and pungent salts, as garlick, onion, radishes, &c. salt flesh and fish, may likewise be in the number of external, antecedent causes of ulcers: hence it very often happens,



happens, that after a lent time, that has been strictly observed, in which one has scarce eat any thing else but such salt food, the spring coming on, at which time the humours ferment and encrease, there are a great many itchy and leprous persons, because the salt food which they have been long and very much used to, has augmented the proper salt of the natural balsam; which being thus augmented, is separated, dried, coagulated, and calcined towards the extremities, and on the skin, where it is driven out by the excretory faculty; but not being able to pass thro' the pores, on account of its coagulation, there it stops, causes itchings, corrodes and produces very ugly and disagreeable ulcers in the skin. The excessive and violent motions of our bodies, immoderate and continual running and jumping, may likewise be reckoned in the number of external causes of ulcers; for these too violent and too long motions, may, in such a manner, heat our natural balsam, that it throws out, by its excretory faculty, towards some extremity of our body, the acrid and pungent salt with which it is found impregnated; that there this salt is dried and calcined, and corrodes the skin, and therein produces an ulcer, whose malignity shall answer to the acrimony and pungency of the salt which has been thrown out in this part.

Another thing which I cannot omit, as it is my principal aim, is the bad food that is given

+ given to new-born infants, such as milk, and the little care that is taken in the choice of a good nurse, the crude and ill-made pap, which is given them too soon, instead of good milk; all this contributes to foment and cause the king's-evil: as this is a matter of great importance, and as it is necessary to clear it well up, in order to avoid this cruel disease, I shall resume the subject.

But some doctor will tell me, I mean one of those who has nothing to vaunt but his greek and latin, and how to reckon up six-and-twenty humours, both alimentary and excrementitious, formed and contained in the human body, which they, for the most part, make to play off, without much discernment, like the water-works at Marly; doctors, who look upon it as beneath them to handle the shovel and tongs, and to soil their fair soft hands with the coals, which however is the only way to come at the secrets of nature: such a doctor, I say, will come and tell me, with an air of triumph and ridicule, that I make our body to be a sort of mine; and that if my system were received, I might give rise to the establishing a new kind of tax.

I answer, that if he was acquainted with the nature and composition of the animal, he would change his stile; that the variety of things which concur in man, should make him to be looked upon as a microcosm; he has mines the same as the great world, in which



which are found salts of different natures : there are vitriolick, aluminous, nitrous, fixt, and volatile salts, such as those contained in the blood, the spirits, and the brain, where they are highly exalted : they are, on the other hand, fixed in the bones, or at least the greatest part is so ; there are in the mouth salts partly aluminous, and partly nitrous : these dissolvents, mixing with those in the stomach, which are of a vitriolick nature, form an aqua fortis, which constitutes the dissolvent that resides in that part ; the salts in the kidneys and bladder are mixed with those of a fixed and volatile nature ; and hence it is, in part, that stones are easily formed in this viscus, and that the bladder is subject to considerable smart pains, which these sorts of salts most frequently occasion ; they are lixivious and nitrous in the glands of the mesentery. Lastly, in the gall-bladder may be seen burning sulphurs, so many reservoirs, and so many mines of different sulphurs. Thus it is that the mechanism of the microcosm is found disposed. But to return.

There is still behind another external antecedent cause, which disposes the salt, not only that of the ulcer itself, but likewise that of the natural balsam, to a desiccation, coagulation, and calcination : this cause will be rejected by the scholastick and systematick physicians of our days ; yet it will not be the less real for that ; and as I only write for truth, I cannot resolve to conceal it, how-  

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ever people may stare at me, and treat me as whimsical. All the complaisance which I thought I was obliged to shew in favour of the ignorant prejudice, and the moderate degree of understanding, in these pretended libertines, is to have placed this the last, that having at least comprehended and understood the preceding causes, they would be contented to let this one alone for those who, being free from all prejudice, will take the pains to examine and weigh it in the scales of nature.

This cause, which I mean, is the concurrence and influence of the stars, which by means of their fiery astral virtue, can at certain times, and in certain circumstances, dispose the salt to a coagulation and calcination; for it is very true, that the stars which rule over our natural balsam, augment sometimes the salt, sometimes the mercury, and at other times the sulphur; so that these stars, which multiply the salt, are the same which, by that means, coagulate and calcine it; whence follows a solution of the continuity, and an ulcer in the part where this multiplication and calcination of salt is found. These stars, which by their real influences multiply the salt in our balsam, can likewise do so in any particular part of our bodies, calcine it there, and by that means dispose it to bring about, in that part, the solution of the continuity, and the ulcer of which they are truly the proximate conjoint cause. We have but too often sensible proofs of this real effect of the influence



influence of the stars, seeing at certain times of the year, in certain climates, and certain countries, several persons, of different ages, different sexes, and different constitutions, are attacked with particular and extraordinary ulcers, without having contributed thereto by their conduct, regimen of life, excesses, or peculiar diet, any wise different from what the neighbouring people have lived upon, who have been free from the like diseases; it is owing to the influence being different, and exerting itself in one place, and not in another; we may affirm or we may deny it: but nothing is more certain in nature, “than  
“ that every epidemical disease comes from  
“ above.”

It is a received opinion among divines, philosophers, and great physicians, that the superior bodies act upon the inferior by their light, motion, and by communicating their very volatile parts; this is what I mean by influence: wherefore we read in Genesis<sup>a</sup>, that God created in the beginning of the world, two great luminaries in the firmament, the sun, moon, and also the stars, to divide the days and nights, the months and years. It is certain that their changes cause the difference in the seasons of spring, summer, autumn, and winter; and that by the rising and setting of these very stars, one may  
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<sup>a</sup> Let there be lights in the firmament of heaven, and let them divide the day from the night, and let them be for signs and for seasons, and for days and years.

foretel fair weather, storms, frost, rain and wind, and even the diseases which happen not only to mankind, but likewise to all other animals. Aristotle assures us, that this animal virtue which we breathe, and which is diffused throughout the earth, derives its origin from the heavens; and <sup>b</sup> St. Augustin, the most learned, and most intelligent of all the fathers, says, that the inferior and grosser bodies, are governed subordinately by the superior and more subtile bodies. Thus the sun, the parent of nature, is the cause of all productions by his approach and presence; as he is the cause of all corruptions by his absence and distance. It is this noble luminary that exhilarates the whole world; at his approach all things here below assume a fresh vigour, the radical moisture is augmented, and men seem to be born again as it were. Hippocrates advises such as follow physick, to beware of the two solstices, and the two equinoxes, when the business is to prescribe remedies on account of the bad temperament and change of the air; and lastly, he would have people consider the pleiads and dog-star, seeing, at those times when they rule, there happen great changes in the air, whence arise a vast many diseases. We therefore may draw this conclusion, from what has been just said, how necessary and important

<sup>b</sup> Corpori cœlesti etiam terrena corpora subiecta sunt. D. Aug. l. 4. de lib. art. 6. c. 13. Even terrestrial bodies are subject to the celestial body.



tant the knowledge of astronomy is to physicians, in order to find out, by the nature of the ruling star, its qualities; and by its motion and different aspects, its concurrence and secret influence, the changes of the weather and air; yet ought not people to abuse this divine science, in order to discover the good and bad fortune of men: it should be used, as St. Augustine says, only to observe by this means that which may be useful to man for his necessity and use, to foresee the changes in the air that should happen during the summer, winter, autumn, and spring. In fine, in order to be well acquainted with the diseases that may happen, to foretel their issue, and to accommodate remedies accordingly, it is sufficient for me to prove the necessity of this science, that it is authorised by Hippocrates the prince of physicians, supported by Aristotle, Avicenna, and the most celebrated physicians; and that it is founded upon natural reason, and a vast number of experiments.

I am not ignorant that this science has had powerful adversaries; at the head of the moderns I place Descartes, whose knowledge I shall never forbear admiring. But it is not the science in itself which they condemn, it is a certain measure, a certain degree of knowledge, and certain attributes, which some enthusiastical persons would ascribe to it, who push the best things too far, and abuse them, and who run after the mar-  
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vellous,



vellous, which dazzles them, and turns them out of the true road, instead of enlightening and guiding them in the right way. Also, in order to understand this divine science, a man must be one of those privileged persons, lovers of truth, and enemies of error, such as St. Augustine and St. Thomas the angelick doctor, whom we may oppose to those pretended libertines of our days, who in the disquisition of the reality and certainty of this science, agree, that, besides the heat and light, there are influences in all the stars, capable of producing powerful motions in all lower bodies, and even changing the constitution of men, and by this means causing in them diverse diseases, and different inclinations, leaving however the will at liberty, over which they have no direct nor absolute power.

In fine, it is certain that the greatest part of diseases are caused by the different influences of the stars; and this is the opinion of Dr. Mead a celebrated physician; which he proves by the following principles: 1. The air which we breathe continually mixes with the liquors which circulate in our bodies, temper them, if it be temperate, and alters them, if it be corrupted. 2. The pressure of the air is necessary to hinder the impetuosity of the spirits which put the blood and other fluids into the motion, which they require, in order to circulate; and it communicates a proper activity to the original springs: this pressure,



pressure, being more or less strong upon bodies, discomposes their œconomy. 3. The sun and moon press unequally the air, according to the diversity of their course; they make the strongest impressions upon this element at the time of their conjunction or opposition, but especially during the equinoxes. 4. The air being elastick, makes efforts in order to counterbalance the force that confines it; so that it violently pushes whatever touches it. 5. Cold and heat occasion considerable alterations in the machine of the body; heat exalts the bile, dissipates the spirits, causes a fermentation of the humours which sours them. Cold, on the contrary, freezes the humours, thickens the blood, embarrasses the spirits, stupifies the original springs. It cannot be denied, but this variation of the seasons, is the cause of a great many diseases. Will one deny, but it is itself the effect of the action of the sun upon the air: the other stars likewise contribute, in their way, to the vicissitudes of the temperature of the air: to these principles may be added sensible experiments. Several diseases have their revolutions regulated by the motion of the moon; the epilepsy, for instance; madness, foolishness, and other disorders, have their crisis.

I could cite a great number of other authorities, and call in to my assistance the most celebrated authors, such as nature would avow for her dearest and most favourite sons, from whom she has concealed nothing; but this



might carry me too far; keeping my principal object in view, I chuse rather to confine myself to my subject, and continue to be short, than by long circumlocutions, and by citations from known authors, make an idle parade of misplaced learning; because I think one is really more knowing, when he can bring forth something good from his own stock, than to collect the opinions of an hundred authors, what capacity soever one may have in the doing it. Moreover we have room to believe, that what we have said is more than sufficient to establish our opinion.

That which is most troublesome in the ulcers which have such a cause, is that they are extremely difficult to cure, because that cannot be done, while the star rules, any otherwise than by removing or blunting its influence, which is the conjoint cause that produces them: for nothing is more nice and difficult than to remove or change the influence of a star, a thing that cannot be done but by a compleat and very experienced astronomer, an ingenious and genuine philosopher, who, to produce this marvellous effect, finds out another terrestrial star that can combat and extinguish the force of the celestial one, or divert its influence, or hinder the efficacy of its action, by strengthening the part affected, by cicatrizing the ulcer, and by restoring its due and natural temper to our balsam.

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The causes simply external, are all such things as applied externally upon any part of our bodies, have force and power to corrode it, and break its continuity; such are all the aquæ fortes and violent causticks, several sorts of plants, roots and herbs; for instance, the crow-foot, climber, and figwort, which professed beggars make use of, by applying them upon their arms, legs, and thighs, in order to raise ulcers; and also on the head, in order to cause the scurf; and by that culpable industry, to move the compassion of the unthinking, and extort their money in charity. All these ulcers, caused by such means, are very easily and readily cured; there needs no more but to wash them with warm wine, which extracts the juice of the ulcerating plant; and as soon as this external cause is taken away, the part heals up by virtue of the natural balsam alone; a thing that might be done very soon and very easily, in all natural ulcers, if their antecedent internal cause could be removed the same way as these simple external causes can; but this is a work that rarely succeeds by means of common galenical medicaments, and is even tedious with common spagirical medicaments and balsams. There is nothing but the true philosophick tincture, which is the Arabick balsam, to which this faculty of curing immediately is reserved.

But it is not sufficient to imagine that salt is the primary, internal, and efficient cause of



all sorts of ulcers, it is farther necessary to know, that as we have different sorts of salts in our natural composition, so we are subject to different sorts of ulcers, whose difference arises chiefly from the diversity of salts; the difference of the place where the salt has been deposited, and the difference of the parts of our bodies where the ulcer is formed, concur in this diversity of species: so that we can boldly aver, that a physician-surgeon who does not perfectly know this difference in our salts, what is the nature of the one and the other, and who cannot distinguish of what species those salts are, which have produced the ulcer, can never apply the remedies proper for a perfect cure; and if he cure sometimes, without having this knowledge, this happy success ought to be ascribed only to chance, or to nature, and not at all to his skill and knowledge; consequently he deserves neither to be praised nor trusted: for, being ignorant of what quality the caustick salt is, which has ulcerated the part he treats, how is it possible for him to pitch upon another salt which is contrary to that which has caused the ulcer; for him to be able to extinguish the fire, moderate its force, and blunt its corrosive quality? Herein, however, consists the whole art of curing; and as, for instance, in the great world, salt of tartar extinguishes the corrosive fire of aqua fortis, and tempers it to such a degree, that it may be drank without any danger: so in



the microcosm, namely, man, salt of tartar, prepared according to my way, will cure every ulcer that proceeds from a caustic, vitriolic, and nitrous salt; and so as to other salts, each of which has its contrary, which one must know, and its preparation too.

This knowledge of different sorts of salts, is not only necessary for the cure of different sorts of ulcers with which we may be attacked, but it is likewise so for treating the stone, gravel, and gout, &c. which one may cure infallibly, if he has this exact knowledge of salts; for that which is coagulated, is dissipated and dissolved by its contrary; and that which is dissolved, is cured and consolidated by that which is coagulated; the whole being performed according to the invariable laws of nature, and the constant rules which we learn from art.

As to what regards the difference of ulcers which arise from the place, and the parts of the body which they affect, it has nothing very essential, only occasioning different denominations to be given to ulcers; if some attention must be given to it, it is only with regard to the construction, the delicacy, and management of the part affected, which the surgeon who treats it ought to observe. For instance, the ulcers upon the head should be treated more gently than those upon the legs, thighs, or arms; and so of the other parts, the contexture and strength of which must be regarded, and the competent remedies applied



plied thereto, in proportion to this strength and temperament, that the natural and balsamic faculty may be therein conserved, in its full vigour, as much as possible.

Let us now come to the particular species of ulcers, called the king's-evil, struma, or scrophula, which is the subject of this chapter; let us find out, in following our principles, the internal, antecedent, and efficient cause; let us give the specifick remedies for the radical cure of this disorder, and shew the manner of administering these remedies, both internally and externally.

We have shewn above, that the diversity of the species and characters of ulcers that attack the human body, in its different parts, only proceeds from the diversity of salts contrary to nature, which are diffused or dissolved in the humours, or coagulated in the emunctories: the nitrous salt is that which produces cancerous ulcers, commonly called the king's-evil.

When this salt abounds very much in the human body, and the superfluous part thereof cannot be carried off through its proper emunctories, which are the kidneys and bladder, it is carried into all the parts of the body, by means of the mercurial, serous, and commonly called pituitous humours, that chiefly abound in the brain, in the emunctory of which, nature has formed several little spongy glands, in order to draw thither, and to receive and digest therein, these serous humours,



humours, and afterwards to discharge, by insensible perspiration, whatever is superfluous and contrary to nature. If it happen that the heat and natural force of these glands be weakened and diminished, the ferous humour encreases mightily, and coagulates in globules or nodes, by virtue of the nitrous salt with which it abounds, which is of the same nature, and operates altogether like that which is diffused throughout the great world. Afterwards this coagulated salt acquires by degrees, not only by means of its proper heat, but likewise by means of that heat in the part where it is fixed, an acrimony, and a burning and caustick heat, whereby it corrodes the skin, and therein forms the ulcer.

The external causes of these ulcers, are all sorts of aliments in which this salt abounds that enter into our bodies, and augmenting the salt which nature has therein deposited, in a proportion requisite for our conservation, cannot be driven from thence, on account of its too great force that resists the natural excretions; therein it causes alterations and great havock, and at length forms therein the ulcer, when it is brought to its exaltation. Thus we see that among animals, only those that feed on all sorts of putrid, feculent, and tartarous aliments, and that eat much thereof, are attacked with these sorts of scrophulous ulcers, as hogs and men, whose tartarous excrements encreasing through their bad regimen, and their feculent food, the nitrous  
anti-

anti-natural salt must needs likewise encrease, and alter to the worse their natural balsam; whence arises the king's-evil, which consequently may very well be defined, "ulcers produced by means of an anti-natural nitre which has got into our natural balsam; and which being separated therefrom, and propelled in the common emunctories of the noble parts, or even sometimes in other parts of the body, is coagulated into stony tophus's and nodus's, and which, in process of time, forms therein cancerous and phagædenick ulcers, by means of the acrimony and caustick quality which this salt has acquired in calcination."

What we have hitherto said upon this article, has a direct regard only to adult persons, and is too general to make, according to my intention, any particular application thereof to infants, the principal aim of my labours, seeing their melancholy situation induced me to write this treatise.

A great number of reflections present themselves of their own accord, which might furnish us with a good many observations, in order to discover and make known the heinousness of the crimes of parents towards these poor victims; but it is in vain for me to attempt extirpating certain inveterate vices, and correcting pernicious customs; this is a work above my abilities, and requires a more than human force.



It was the doctrine of Crates, Plato, and all true philosophers, that the most weighty concern of man is, that of having sound and well-constituted children. The Lacedemonians condemned to very rigorous punishments the parents, whenever their children were of a bad constitution.

But need we the precepts of ancient sages, seeing religion, reason, and even nature herself, prescribe to us the care and conservation of our children; laws so very precious, gentle, and amiable, seeing a principle implanted in the inmost part of our hearts, cherished by our natural fondness and tenderness, incessantly represent these duties to us.

However, if we go up to the primary cause of scrophula's, with which infants are attacked, it will be found, that very often it is derived from the original conformation, that is to say, it derives its origin from fathers and mothers infected with the like leaven; and this sort of scrophula is very hard to cure. It is farther certain, that this disease depends on the first food that is given to children, which in some measure is the fault of parents.

That the cause of cold humours sometimes derives its origin from the primary conformation, is a thing that cannot be doubted, since we see, every day, gouty persons beget gouty children, and phthifical persons phthifical children; and since we see even scrophulous

phulous persons give birth to children who are very soon attacked with this disorder.

This appears to us less sensibly, because the greatest part of infants who are born of unsound parents, are cut off in the cradle, or at least but seldom arrive at an age which allows those diseases, of which they have the seeds in them, to shew themselves.

It may moreover happen, that when the leaven of the original conformation shall be very slight, this disease shall be surmounted by the energick qualities of the milk of a good nurse, and the bad constitution restored to an entire soundness, by means of good food; as we sometimes see happen to infants who are purged of their bad humours, by the strength and goodness of their nurses's milk, which throws them out, by causing scabs to break out on the head, and crusty ulcers on the face, and sometimes in other parts of the body, which discharge a great deal of virulent matter and impurities, a thing that unhappily is very rare; for we find a great many more bad nurses, that can alter the good constitution of their nurslings, than such as are proper to procure them a good and firm state of health: and this is likewise what makes us ascribe chiefly to nurses that are taken to infants, the most general cause of these diseases.

Not only the bad qualities of the milk of nurses, may give occasion to the disease in question, whether it be that it is too thick,  
viscous,



viscous, acid, rank, or of some other bad quality; but a great many other bad foods, which they make their nurslings take, may farther occasion the same disorder, as that of the pap, which they give them prematurely, or which is badly prepared; bad fruits, bad drinks, or the slovenliness in which some people keep their children; all these things contribute to this disease. People, therefore, ought not to neglect taking care of the health of their children in this particular, either as to the choice of nurses, or of food; or, lastly, the quality of the milk. On this head may be seen what authors say, particularly Dr. Joubert, physician in ordinary to Louis XIII. chancellor of the college of physick at Montpellier, in his book of popular errors, as to physick, and the regimen of health; Dr. Walter Harris, physician to the king of England, in his treatise on acute diseases in children; and Dubois, in his treatise on the king's-evil. They enter into a circumstantial detail of all these matters, which though in appearance of little importance, yet for all that are of very great consequence.

In fact, the most celebrated authors of antiquity, even the holy scriptures, have looked upon this point as so considerable and essential, that they have treated on it expressly; they do it in a natural, scientific method; I cannot forbear giving their own words, without any alteration: <sup>a</sup> the child shall

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<sup>a</sup> Ezek. xvi. 4.

shall be washed with warm water, and salted, in order to render his limbs at the same time supple and strong, to dry his flesh and brain, and strengthen his sinews.

If a nurse is to be chosen, she should be young, of a constitution as little cold and moist as possible, accustomed to labour, and little eating, enured to cold and heat, and of good morals: I say, to be chosen; for, according to reason and the opinion of all philosophers, it ought to be the mother who should undertake this task, if her health and strength permit, being thereto obliged by nature, which has for those ends given her milk in her breasts; after the example of beasts, by a fondness and jealousy which she ought to have for her young, who receive very great damage from change of food, it possibly happening that strangers may be very unsound, and of a temperament quite contrary to the first, being only mothers by halves: “What<sup>b</sup> is this imperfect and half-kind of mother contrary to nature! that she should have brought forth, and directly thrown away the child from her, that she should feed in her womb with her own blood I know not what she had not seen; and not feed with her milk what she sees now living, now a man child, and now imploring the friendly offices of a mother?” Let its food, besides the breast, be goat’s milk, or rather butter, which is the more subtile and aerial  
part

<sup>b</sup> Aul. Gell. l. 12. v. 1.



part of milk, boiled with some honey, and a little salt, which are things very proper for both body and mind, according to the rules of all philosophers and great physicians, greek and jewish: Butter<sup>c</sup> and honey shall he eat, that he may know to refuse the evil, and chuse the good. The quality of milk or butter is very temperate, and it yields good nourishment; the dryness of honey and salt, absorbs the two great moisture of the brain, and disposes it to wisdom.

In fine, infants ought to be, by degrees, accustomed and hardened to the air, to heat and cold; a thing which need not be dreaded, seeing in the North they wash new-born infants in cold water, and they find them very well after it.

I will finish this article upon the milk of the nurse, by saying, that it must be of a good consistence, neither too fluid, nor too tenacious; thick, clammy, or fatty milk, fills too much a new-born infant, and does not give sufficient energy to the solids, and clogs their systaltick force. In a word, the favour of milk, in order to be laudable and wholesome, should taste like walnuts or sweet almonds, and be a little sweet; that which is insipid, acid, salt, rank, or of any other taste but the first, should be rejected as prejudicial. The good taste of milk carries along with it a good smell, together with sweetness, according to the axiom, *quod nutrit*

*trit dulce esse debet*, that which is nourishing ought to be sweet.

But there is a very important question to be decided, or at least cleared up; to wit, whether scrophulous ulcers have an immediate relation and connexion with the pox, or whether they be a particular species of it, or some of the symptoms and consequences of an universal pox. The most celebrated authors are divided on this head; and the most generally received opinion, at this day, is the affirmative. However, we have given above the antecedent causes, both internal and external, of the king's-evil, very far differing from those of the pox. But, without deviating from our opinion, we may say that, tho' the scrophulous virus be different from the pocky, and tho' one may have each of these diseases separately, however these two virus's, tho' distinct, are very analogous, and have a great affinity with each other, especially in hereditary scrophula's: and we may say, in this case, that the scrophulous virus partakes of the pocky virus. That which confirms me in this opinion is, that one may see that those who have had venereal diseases, have scrophulous children; and that the children born before the parents were infected, are not attacked by the king's-evil. This also proves, that the salt that can produce the king's-evil is of a like nature with that of the pox, differing only at certain times in quality; which quality changes, and becomes like that  
of



of the pocky virus, by means of the motion and action of the ferment; and this occasions its desiccation and calcination; and both these are fomented and occasioned by the pocky virus, and causes this alteration, like the leaven that is made of a piece of paste, and becoming four, communicates its virtue to a mass of the like matter.

It seems by this, that it may be said, in a certain sense, that every one of us has, in some measure, the seeds of a scrophulous leaven; that is to say, that the salt, sulphur, and mercury, which necessarily enter into the composition of each individual, are mild, benign, and salutary, and that they are the cause of our conservation, when a happy harmony reigns among them; and that on this harmony, and their union according to nature, depend our life and health; whereas when this œconomy is out of order, by some extraneous and heterogeneous cause, they are soured, become acid, acrid, and pungent, cause diseases, and at last death.

By means of this simple and natural philosophy, stripped of swollen words and uncommon phrases, one may very fully explain the opinion of Vanhelmont, that celebrated chemist, which some libertines of our day have pretended to turn into ridicule, that the changes, convulsions, or powerful contractions, which are caused in the parts of our bodies, depend on the archeus; that is to say, on the principle born with each animal, to

produce and regulate all the actions competent to its particular species : so that this principle conceiving a melancholy idea, as it were, of the inconveniency that is superinduced on the machine which it should regulate, is irritated, is enraged, and puts everything in commotion, if it be not speedily appeased.

*Diagnostick.* A benign scrophula is known by its being superficial, by not breaking out much in the skin, by not changing the colour thereof; and when handled, there are only felt some swollen glands, not very hard, moveable, without adhesion or pain, and by its not being accompanied with any of the troublesome symptoms which we have mentioned. The malignant king's-evil shews itself by the bigness of the tumour, its hardness and adhesion, by the livid or red colour that comes on, by the pain that is felt therein, by the callousness of the edges of the ulcer resulting therefrom; and when it comes to a suppuration, by its obstinacy against the efficacy of remedies, and the fatal symptoms that accompany it. We find that all the diseases of which we have been speaking, acknowledge a scrophulous virus for their cause, when we know that the parents have had venereal diseases, or when they, or their other children, have either been, or are now attacked with the king's-evil; or when the persons affected have lived with scrophulous persons; or when their disease is accompanied  
with



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with swollen and hard glands in the neck, arm-pits, and groins, or with cold tumours in other parts of the body.

*Prognostick.* The benign or simple king's-evil, may be cured in the beginning by proper remedies, especially if it attack the conglobate glands, if moveable, superficial, and not very hard: that which attacks the joints, tendons, ligaments, and the bones that are near the large vessels, or compress the trachæa, the œsophagus, is very troublesome and hard to cure: the internal king's-evil is a great deal more dangerous than the external, for no remedy can be immediately applied thereto; and when it comes to an abscess, it is mortal. It may be said, that there is no chronical disease which is more dangerous, and less subject to the efficacy of remedies, than the malignant king's-evil; it is commonly the plague of the persons afflicted with it, and the reproach of physicians: it is, however, more or less troublesome, according to the progress it has made, the parts it attacks, and the temperament of the patients: it does great havock in such as are bilious or melancholy. The tartarous moleculæ, with which their blood is impregnated, uniting with the scrophulous virus, render it still more corrosive, capable of producing a caries in the bones, and causing fistulous or cancerous ulcers. The king's-evil, accompanied with the troublesome diseases which we have already mentioned, admit at most

but of a palliative cure; that which is hereditary, or fomented by the vitiousness of the humours in a cacochymical constitution, does not yield but with a great deal of difficulty; and often, after being cured in one place, it breaks out with greater fury in another. When it disappears of itself, it is very much to be dreaded; the scrophulous virus mixing again with the blood, does not fail to throw itself upon the lungs, the mesentery, or some other viscus, and to cause internal abscesses, a slow fever, or some other fatal accident. An ulcerous king's-evil is harder to cure than that which is not so; if it become fistulous or cancerous, it is very obstinate, and hard to cure.

*A general cure for the king's-evil.*

All the remedies in general which multiply the natural spirits, and augment their force, purify the blood, and soften the humours, are sovereign remedies for preventing and curing these ulcers: but in order to give a proper method for this cure, and shew the particular and specifick remedies, we will farther add, that as this cure depends upon removing, or at least diminishing the nitrous salt which has been gathered together beyond measure in our natural balsam, this salt being the only antecedent cause of this disorder, we must first of all begin by following a proper regimen, and only using mild food, that contains but little salt, and little tartarous



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rous excrements, of easy digestion, and spiritous; and afterwards purging every full moon, either with our antimonial powder of Grimaldi's, from twelve to fifteen or thirty grains, according to the age and temperament of the patient; or with the prepared and precipitated mercury with rectified oil of vitriol, or oil of sulphur, by cohobating three or four times the distillation, which must afterwards be thoroughlyedulcorated by several repeated lotions made with common, soft, and clear water, until the whole acrimony, and tincture of the oil of vitriol, or sulphur, be taken away. The dose is to be from twelve to fifteen grains, incorporated with conserve of roses. If, before precipitating your mercury, you make an amalgama with pure gold, and fix it, or at least coagulate it with mineral oils, as we have already shewn, the remedy will become more powerful, and the purging more salutary. One may, if the indication require it, let blood of the patient, in proportion to his present state, his age, and strength, either before or after the purge.

This method is excellent and sufficient, when a person can patiently wait the cure which nature herself accomplishes, when she is assisted by the regimen and remedies which we have shewn: but when the cure of the disease is pressing, and one wants to be delivered from it, before it make considerable and sudden progress, before the ulcers become large, numerous, and very apparent on  
the

the parts of the body exposed to view ; and as, by reason of one's situation and affairs, he is obliged to appear in publick, and is afraid of the shame which the disease occasions from the disgust it gives, and the apprehension of the consequences which those are under, who know that we are attacked with it, we must, in this case, proceed to the cure by a speedier way, but with the same remedies, and upon the same principles. Wherefore following the same regimen, and using the same food, which we have shewn above, the patient is to be purged, three days running, with the purge already mentioned, either our golden pills, or our mercury precipitated with oil of vitriol or sulphur ; after which is to be applied upon the ulcer, or the part affected, when it is not open, and the ulcer has not broke outwardly, a plaister made of Paracelsus's magnetick ointment, the composition of which is this :

Take of orpiment and arsenick together one ounce ; sulphur and crude antimony powdered, an ounce of each ; the whole mixed together : you shall put it into a glass vessel luted, to dissolve and digest on the fire for a good hour ; take it off the fire after this, and let it cool. You will have a black and shining mass, which is what they call the arsenical magnet of Paracelsus : take an ounce of this composition, and having reduced it to a fine powder, or an alcohol, you will put it to the plaister of sulphur, of which you shall  
make



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make a marvelous and sovereign plaister, to remove and root out, without pain or danger, all sorts of scrophula's, whether ulcerated or not, yet still nodous and tophaceous, and that in the space of a month or six weeks. When all the king's-evil is removed, the wound must be healed up and cicatrized; and to bring the part to its natural state, you must apply thereto some of our solar balsam, and likewise purge the patient, from time to time, with our golden pills.

But our genuine and perfect philosophical quintessences, will perform the cure in a much gentler, shorter, and more compleat manner. Those which are specificks for this disease, may be taken from these three species of the animal kingdom, the quintessences of human blood, those of deer's flesh, and those of wolf's flesh. Those of the vegetable kingdom are of poppy, centaury, comfrey, the birth-worts, figwort, and hellebore. And those of the mineral kingdom, are the marcasites of gold, of orpiment, and antimony. Lastly, those of mercury, nitre, and common salt, taken inwardly, or applied outwardly. As to all these quintessences, not only how to make them accurately, but to use them salutarily, see *La myrothecie spagirique* of Peter-John Fabre, a physician of the faculty at Montpellier, l. 1, 2, and 3. All these quintessences we will give in a particular chapter.

Of

Of all these quintessences, the greatest specifick against the king's-evil, is that of mercury, especially if thereto be added a little of the quintessence of human blood, and likewise of the oil of gold, if one will: but without these excellent additions, the oil or quintessence of mercury, prepared according to art, with a good and true spirit of salt, animated with the alcohol of wine, and the pure solar spirit, is highly valuable: our neutral salt is also a specifick in this disease; we shall give it hereafter, when we come to treat of our particular method. This salt surpasses all others, in correcting and destroying, without bad symptoms and danger, all the corruption and surcharge of humours, with their preternatural excess of salt, of what nature and kind soever, and at the same time in blunting the acrimony of that which remains behind. This admirable salt repairs the decays of nature, removes disorders, cures diseases, consolidates wounds, and cicatrises ulcers, in a manner, as to be the most sovereign, the most infallible, and most specifick remedy in nature, for effecting a compleat and perfect cure of the scrophula, either recent or inveterate, ulcerated or not ulcerated.

Let us at present, before we come to our particular method, examine the scrophulous disorders that have hitherto been observed, with the remedies used for them; and let us chuse among them such as have been imagined to be the best, and which have had the



the most share of reputation; to be able to make a just parallel, and to determine in our favour, and consequently in favour of the publick, since it is from the preference and use of these remedies alone, patients ought to expect a quick, an easy, and a radical cure.

AN ARTICLE,

*Containing the practice of the ancients and moderns, with the remedies used for the cure of the scrophula and cold humours.*

Galen, in the third book of his method, recommends, for the cure of this disease, the use of the theriaca, tanfy, ambrosia, water-calamint: these remedies cannot fail of being very good, as coming from the hands of so great a master; but they are far from being sufficient for the cure of a disease so obstinate and stubborn as the inveterate scrophula; we need remedies more active, and more vigorous, for cleaning the primæ viæ, and clearing the fluids, charged with scrophulous salts and ferments.

Avicenna would have an abstinence observed from all gross foods, recommends living soberly, not drinking cold liquors, but moderately of good wine, aluminous and sulphurated waters.

Arnoldus de Villa Nova advises also the use of mineral waters, chiefly those that taste of tartar; the necessity of purging the humours downwards, and discharging them  
sometimes

sometimes by bleeding, as is found needful; the use of diureticks, for evacuating the superfluous serosities by urine; the use of resolvents, which rarify the humours, as turbith and ginger; he besides recommends the root of figwort in powder, given in the dose of a scruple.

Rhasis, a bold practitioner of his time, used perhaps with too much confidence, and in too large a dose, carduus, ivy, the pills of agarick and the greater hermodactil.

Guy de Chauliac, who is of the opinion of Avicenna and Raymund Lully, proposes, on his own authority, the decoctions of figwort, dropwort, burnet, hawkweed, and red-cabbage, of each two handfuls, chopped and boiled for some hours, in white-wine, to half the quantity, adding a sufficient quantity of virgin honey, for the patient to take, every three days, a dose of between five and six ounces.

Planis Campy, a good chemist, but who perhaps is chargeable with a neglect of the other essential parts of physick, and of informing himself duly of the animal œconomy, in order to understand the true cause of the disorder, ascribes the cause of scrophulous tumours, to an humour distilling from the brain; this explication is too general, and says not enough of the matter.

But if Planis Campy understood not the source of the disorder, he yet understood its nature, and the proper remedies for it, which



doubtless is the most essential thing. This chemist recommends, for the cure of scrophula's, his mercurius vitæ, which purges upwards and downwards, and provokes sweat, and which is a good remedy, when well prepared and ordered by an able artist; for we have seen some quacks of our days, who, under the veil of mystery, would make a secret of this remedy, and pretend to make their fortune by it. They have indeed used it so indiscretely, as often to have caused very fatal effects to the patients. Let this be said, in passage, to shew the little dependence there is to be made on these people of pretended secrets, who, for the most part, rummage old musty books for some remedies, which they fail not to spoil in the very composition, and who without choice, without skill, without art, discernment, and experience, make use of them indiscriminately, and commit, in some measure, an assassinate upon the poor patients, previously drawing their money from them, having the precaution to exact upon them before-hand. And after this, can any one be displeased with what M. Astruc says of such people.

It is not only in France that these vermin are produced, they are the growth of every age, and of every country; and I cannot forbear relating here what Dr. Walter Harris says of them, in his treatise of venereal diseases, printed at London in 1705. With respect, says he, to these impostors, who, without

without knowledge, and under favour of some pretended secret, promise, by an easy and compendious method, an infallible cure; I cannot help thinking such fellows deserve a good sound cudgelling, rather than to be treated with the ceremony and formality of argument, and to have the authority of the magistrate employed against them, to inflict the punishments they justly merit; as fitter for a halter, in quality of publick insulters, than to be opposed by solid reasons, and the force of decisive arguments.

But let us return to Planis Campy; he proposes the salt of guaijac, the magistery of tartar, the fixed flowers of antimony, the bezoar mineral, solar, jovial, and mercurial. In fine, this author, after having described, in his manner, the means of destroying the antecedent cause, which gives rise to, and foment the scrophula, and the method of removing the concomitants, gives an ample description of several good remedies, such as the quintessence of pearls, a sudorific ptisan, his mercurius vitæ, his panacea of sulphur, or cinnabar of antimony, and other remedies, which may be seen in this author, and which it would be too tedious and unuseful to relate here, as his book is published, and in every body's hands.

Others employ, for the cure of this disease, calcined pumice-stone, crabs-eyes, corals, diaphoretick antimony, the anti-hectick of Poterius, and the like absorbents. Some, with



with a view of sweetening the blood and lymph, of rendering them more fluid, and removing the obstructions of the mesentery, recommend twenty drops of a volatile, aromatic, oily spirit, or the same quantity of antimony, in a glass of the decoction of the woods every morning for two months. Scultetus greatly esteems the electuary made with the powder of lizard and honey, to be taken every morning, for two months, the quantity of a nutmeg. Neufneieux orders, as a specific, the decoction of the root of swallow-wort, to be continued, according to this author, for a long time; others, viper broths. Gabriel Fallopius commends the root of the smaller holly in powder, and taken in wine in the dose of a dram, with ten grains of the powder of the root of the iris or flower-de-lys, for forty days together.

Mr. Boyle commends the plant called paronychia, or mountain-knot-grass, infused in small-beer, and taken for some days; Zacutus Lusitanus, the unguent made with the root of briony; M. Didier is for bathing and mercurial frictions, in small doses, at proper intervals. In fine, I should never have done, were I to recite the several opinions, the different remedies, and the different methods, that have been practised and used for this distemper: but that which was most in vogue and reputation in France, and especially at Paris, is a preparation of diaphoretick antimony, known under the name of Routrou's

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powder,

powder, a surgeon of St. Cyr, who first used it, or at least revived its use, and which consists of the aurifick tincture of Basil Valentine, the aurifick elixir, the great resolvent of Paracelsus, the alkahest of Vanhelmont, the alkali of the sieur Routrou, and the paste or purging pill; which can only go down with the ignorant, by means of the pompous names of great authors, with which Routrou has thought fit to adorn his remedy: for as M. Astruc very judiciously remarks, this remedy, like most others, which gain for some time the greatest eulogies of the credulous and prejudicated publick, has more reputation than real good effect. Its composition, and the manner of using it, are so exactly described in Astruc and Col de Villars, that I forbear charging this treatise with them.

### *External remedies.*

It is certain, that the external remedies proper in scrophula's should tend to their resolution, their consumption, or extirpation; but what extraordinary and inhuman methods are not used to accomplish this? I forbear rehearsing them all, as they cause too much horror; the knife, the fire, all are used therein, and very often unsuccessfully, the patient expiring amidst racking tortures. I will here draw the vail, and confine myself, in general to relate simply some of the best remedies which may be reasonably used.

Such



Such are resolutives, the diabotanium simple or mercurified, the emplaister of Vigo with mercury, the emplaister diachilon gum-mated, malaxed with equal parts of the emplaister of mucilage, and mixed with an equal quantity of quicksilver, extinguished with spittle, and a little philosophical oil, the emplaister of Nuremberg, the aromack wine, camomile, melilot, and a little sal armoniac, or resolute cataplasms.

The ablest physicians and surgeons are agreed, that when there are many scrophulous tumours, neither impostumated, nor ulcerated, that it is dangerous to apply topicks; that by intending to resolve them, the great quantity of virulent humours, which cause them, would be forced back into the mass of blood; which would not fail to bring on some uneasy symptom: or though they came to suppuration, the ulcers resulting would be of very difficult cure.

'Tis for this reason, the most prudent are content to apply raw wool fresh clipp'd, and to keep them very warm; and it is not without example, that by this means alone, together with the use of internal remedies, the most considerable scrophula's have been cured. 'Tis only, therefore, after trying these innocent remedies, and that they are observed to prove unsuccessful, that we may venture to attempt the resolution, when we see the scrophula's are disposed to suppuration. Here

follow the unguents, which are used for that purpose.

Take of oil of laurel and myrtle, of each half an ounce; unguentum martiatum, an ounce; of mercury killed with flowers of sulphur, æthiops mineral, six drams; mix the whole well; or take an emplaister of melilot, viper-fat, and oil of camomile, of each equal parts, which must be melted together.

Rulandus, in his centuries, extols the emplastrum diafulphuris; Borellus commends the oil of toads; Aquapendente that of laurel, cerufs, roch-alum and brandy. There are many authors who are for the sympathetic remedies, or amulets of an occult virtue, such as the roots of sharp-pointed dock wore about the patient's neck, cress-feed, the burnt hoof of an ass, the ashes of weasels mixed with the cast skin of a serpent, &c. If these remedies do no good, they can do no harm; but one must be extremely silly to pay any regard to such trumpery.

We have elsewhere said, that figwort was very good in a cataplasm; but I set bounds to myself on this head, that I may not stuff this treatise with useless cataplasms and emplaisters. As to that of Musitanus, he proposes it as the most efficacious remedy for bringing to maturation, not only scrophula's, but even all sorts of tumours; whatever be in that, here it follows:

Take three pounds of common oil, make it boil to the consumption of the humidity;



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the roots of pond-reeds and white-lilies cleaned, and shred small or pounded, of each three ounces; roots of althæa, an ounce and a half; strain the decoction, and add cerus to it in fine powder, three ounces, prepared tutty half an ounce: boil the mixture to the consistence of an emplaister, stirring it continually with a spatula; afterwards melt therein three ounces of wax, and the vessel being off the fire, mix in two drams of black balsam of Peru.

When scrophulous tumours are considerably inflamed, and become very painful, an emollient and anodyne cataplasm is applied. When the whole is resolved, and without hardness, 'tis here the tragedy begins; I mean the inhuman and painful treatment; the abscess is opened, if any gland remains therein, whether the pus could not consume it, or whether the tumour opened too soon of itself; the caustic is applied, or trochisks of sublimate. And as it is with reason apprehended, that these glands keep up a communication with the blood and lymphatic vessels, and that they supply a saline lymph, which would prevent the cicatrising of the ulcer, and render it fistulous, care is taken to consume them all: the caustic is used, the eschar is cut to the quick, in order to apply a like emplaister to it, and this is continued till all is consumed; then the eschar is made to drop off with a digestive, or fresh butter; the ulcer is deterged with unguentum aposto-

lorum, and balsam Darcus ; after this, a mundificative of parsley is used.

In order to carry away the scrophulous glands, the skin is laid bare at the first as deep as the gland, by means of the caustick ; an incision is made upon it with the lancet, and two or three trochisks of corrosive sublimate, prepared in the following manner, are applied.

Take of corrosive sublimate, an ounce ; opium, dried upon an iron plate, half an ounce ; make a powder, to be incorporated in a sufficient quantity of mucilage, and gum tragacanth, and form a mass, of which you will make trochisks of the size of a small ball.

The trochisk is left on for twelve or fifteen hours ; after some days the gland should come to maturation, and turn black ; if it is not sufficiently burnt, there is still made another incision till it bleeds, and a fresh trochisk is applied, which compleats the destruction of all the ligaments of the gland.

When the glands are burnt, we commonly wait till they detach or separate by suppuration, without forcibly pulling them away ; this is the reason of dressing the ulcer with basilicon, and emplastrum de mucilagine over it ; if there is an inflammation, an emollient cataplasm is applied. After the gland drops out, the ulcer is deterged with mundificatives of parsley ; the proud and superfluous flesh is consumed with the lapis infernalis, or  
the



the red precipitate, or burnt alum, to destroy both root and branch. At each dressing the part should be washed with a deterfive water and wine.

If some humidity still weeps from the the part, it is dried up with a little æthiops mineral mixed with pompholyx, laying over an emplastrum de Vigo quadruplicatum with mercury.

Independently of these methods, which I have just related, as the most perfect, and which are practised and in use at this day; there is another which some practitioners observe; I shall rehearse it very summarily, and thereby the reader will be fully instructed, and in case to decide, which is the best method, and which remedies are the most salutary, most efficacious, and less dangerous.

This method for extirpating the scrophulous glands, consists in making a longitudinal incision upon the tumour, and skilfully, with a scalpel, to detach the gland and its scirrhus, in order to extirpate them, observing not to hurt the vessels and nerves. When an artery, any thing considerable, happens to be opened, a ligature is made upon it; if the artery be but small, 'tis enough to apply a button of vitriol, or to compress it.

I finish this discussion, with relating some observations of Mess. Col. de Villars and Ambrose Pareus made thereon.

This method of extirpating scrophulous glands by caustics, or the knife, says M. Col.

de Villars, is dangerous, when the scrophula's are found fastened to the aspera arteria, or upon the tendons, or near some large vessels, bad symptoms may ensue.

Though M. Col de Villars, whose very words I have just recited, be a man of abilities, yet I find him too cold and indifferent with respect to the method of violent caustics, incisions, and amputations, operations ever cruel, highly dangerous, often uncertain and unuseful.

Ambrose Pareus, a prudent and great practitioner, is not for laying open scrophulous tumours, and particularly upon the first appearance of pus; and he gives this reason, and shews the uselessness of this method, and the injury it causes to the cure. It is certain, says he, that the laying bare the part, prevents the rest to suppurate; on the contrary, the little pus, which is in the wound, not being discharged, surprisngly promotes the suppuration of the matter which remains at the bottom of the abscess, or which is not yet suppurated; and he further says, very sensibly, that if this abscess be laid open before all the matter is turned to pus, the natural heat is evaporated by the dissipation of the spirits, and the access of the air. These reflections are very judicious and masterly, and cannot be enough commended.

M. Dubois, who certainly understood the matter we are upon, and who moreover had a course of great experience, is of the same opinion



opinion with Pareus ; and he adds, that the opening of scrophula's does in nothing promote their cure, especially when performed with incisive instruments.

This doctrine is founded upon that of Hippocrates, who instructs us that the cold air is hurtful to wounds in general ; a thing confirmed to us by experience.

As to the topicks thought proper in scrophula's, they are of too feeble an aid, unless internals, such as we shall direct in our method, have preceded.

In effect, to what end is it to lay open scrophula's, to teaze and disfigure a patient, in other respects unhappy enough ? Scrophula's come to open sufficiently of themselves ; it is true that, sometimes, the ouvertures, which happen naturally, are very small, and that only the more fluid matter is discharged, and that, without opening them by art, and laying bare the bottom of the ulcers, the topical remedies, proper to mundify them, cannot immediately be applied, nor the ligature of the glands be performed, when separated and distinct, to accelerate the cure ; but it cannot be too often repeated, that this extremity of method should not be tried till after having destroyed the antecedent cause, by the means of our remedies ; that done, it will be very easy to remove the concomitants of the ulcerated parts, in spite of the intemperature of the place affected.

This

This matter is of that importance, and I would throw such light upon it, that I cannot help repeating some things; yet I will not deny, that my opposition to incisions may, in some cases, be a bar to a radical cure.

In effect, there are sometimes found scrophulous abscesses, when good internal remedies have not been seasonably enough administered, where the corrosive matter has made itself a passage through one or more apertures, which render the ulcer fistulous, and where the skin encompassing the apertures of the ulcers, is livid, of a leaden and dead hue; I own, that it is then to the purpose to extirpate all this useless dead skin, and tinctured with a bad juice, the better to mundify the ulcers, incarnate and cicatrise them. But once more, a judicious distinction must be made on the nature and situation of these ulcers; for if they are attended with callosities, are situated on the confines of the joints, or very near them, the ouvertures made by art, far from suiting their cure, often rankle and irritate them, and retard the progress of their cure, and therefore are to be avoided.

I am persuaded that the purulent matter of scrophula's is highly acrid and corrosive, and that by its stay it can induce a change on the most solid parts themselves: but that matter, of what nature soever it be, does it make a less progress after the incisions, for laying open the ulcers, and dilating all their sinus's?

No,



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No, experience is on the other side ; for there are cases wherein, by being obstinately bent to come at the heart of the evil, enormous ouvertures must be made, which only put the patient to pain, and retard the cure.

And thus I cannot forbear persisting to blame the use of amputations, incisions, and all the other operations of the knife, in the cure of scrophula's, except in extreme cases where we cannot be off them ; cases certainly very rare : nor should ever these operations be gone upon, without the advice of an able physician.

To shew of what importance it is to avoid, as much as possible, the making these incisions and amputations, we need only attend of what consequence it is to preserve the glands, and their indispensable necessity in the animal œconomy ; whether we allow of the system of the filtrations or secretions of the juices in the glands, or of any other.

We observe in the bodies of animals, a great variety of juices of a different nature, the blood, lymph, spittle, the stomachick, the intestinal, the pancreatick juices, the fat, the bile, and many others. The blood by much surpasses all the others in quantity, and it is that which produces them : each of these liquors is separated from the blood in particular organs, which bear the name of glands ; and the separation of each of these liquors from the rest of the blood, has been called secretion by anatomists. This secre-  
tion

tion supposes two conditions, one on the part of the blood, which should contain parts fit to be separated; the other, on the part of the organ; which should be disposed in a manner, as to let pass certain parts of the mass of blood, and refuse passage to others. But whatever be in this hypothesis, let us return to the glands.

Mr. Winflow, who has examined the whole of this mechanism, explains it thus: A gland, according to him, is but a texture, or rather a congeries of vessels continued and complicated. An artery comes to a gland, whither it conveys the blood; it divides into an infinite number of small fine branches, which ever increase in fineness, till at length they begin again to grow gradually bigger, and it is then they become small branches of veins, which go to join some other vessel a little larger, by which the blood resumes the road of the heart; all these small branches, both arteries and veins, are rolled up in small packets; so that, in a short time, the blood comes to make a great deal of way: from the angles, which these vessels form in their curvature, proceed other fine vessels also.

What M. Winflow says on this head is very ingenious and masterly, and deserves to be perused in his writings. It is sufficient for me to have established of what importance it is to preserve these glands entire, which, by being extirpated, may considerably disconcert



cert the animal œconomy, intercept the circulation, and cause irreparable disorders.

I heartily wish that what I have advanced on the head of the bad effects of incisions, may destroy the prejudice and practice in favour of these cruel operations. Men would have neither reason nor pretext for persisting in this cruel practice, if they would exactly follow my particular method, which I now resume, in order to add to it my specifick taken from antimony, and a somewhat more circumstantiated detail on the demonstration of the remedies, both preparative and curative, whether external or internal, antecedent and consequent.

*A particular method of the author for the cure of cold humours, scrophula's; together with remedies proper in this cure, both external and internal.*

*Preparative remedies.*

1. If there is an indication to let blood, there is no manner of difficulty, but the patient should be blooded.

2. He must be purged with our aurifick pills; the dose to be regulated according to the age and temperament.

3. The patient must be made to use a number of domestick baths, with river-water made luke-warm; their number, and the time the patient is to continue in them, to be regulated by his strength, his temperament,  
and

and his actual state; and an enquiry is to be made, whether there be any internal abscess. A prudent physician ever conducts himself according to the state and circumstances of things, which cannot all be foreseen, with regard to the variation of these very things themselves.

4. The patient to be made to take, while in the bath, an aperitive broth, the composition of which we shall give. At coming out of the bath, the patient to be dried with a warm cloth, and put into bed, after warming it, if the season and time so require.

*The composition, and the manner of preparing the aperitive broth.*

Take cleaned roots of parsley, asparagus, and eryngo, of each half an ounce; of elecampane, three drams; leaves of wild succory, burnet, chervil, and of cress, a handful, and sixty millepedes; put the whole, with half a pound of mutton, and a quarter of fowl, well cleared of the fat, into an earthen body, and pour thereon a pint of river or spring water; cover your body, lute the cover, and place the body in balneo mariæ, and cause to boil for four or five hours: after this strain the broth through a cloth, and make two messes of it, one to be taken in the morning on an empty stomach, or in the bath, as was said; and the other in the afternoon, at some interval after meals, putting into each at taking, eight grains of our sal  
martis.



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martis. The use of these broths is to be continued for twelve or fifteen days, purging the patient in the middle and close of the course, as was said, with the aurifick pills.

### *An internal specifick for the cure of the scrophula.*

5. The patient thus prepared, you will cause him to take, every morning fasting, some of our neutral salt, an admirable and genuine specifick for this terrible disease: it may be taken also either in a little good old wine, or a little broth, to the quantity of between eight and fifteen grains, according to the strength, the age, and temperament of the person, and according to the progress and quality of the distemper, and more or less be employed in the cure, in proportion to the disorder, the progress, and visible and sensible efficacy of the remedy. There is scarce any species of the scrophula so inveterate, which can stand out fifteen takings, or doses of this medicine.

6. An hour after taking the salt, a porringer of whey or broth is to be taken upon it.

### *The composition of the neutral salt.*

Take red mineral antimony, put it into alcohol, and adding a like quantity of lime, of egg-shell, or flint, and eight ounces, to the pound of this antimony, of flowers of zink, reduced to a volatile salt by the spirit of dew, or the universal spirit; mix the whole,

whole, and keep it for five or six days in a stone vessel, well stopped, in a temperate place.

Be provided with a large earthen retort, with its crucible, well baked and tubulated, and put it in a naked reverberatory fire, and fit to it a very large bolt-head of fifty or sixty pints, whose neck is to lie soaking in a vessel or vat of fresh water; cover it with a linen cloth, which you will keep always moist, to facilitate the condensation of the spirits; lute exactly the juncture of the bolt-head to the retort, whose neck should be very long, for the body of the bolt-head to be at a distance from the fire; give a gradual fire till the retort is red-hot.

You will then begin to throw into your retort, by its tube, an ounce of your mixture; directly close up the tube, that no vapour may escape, and in less than two minutes, the vapours will pass into the recipient, where they will be condensed: continue the projection thus from ounce to ounce, till all is in, and till you have enough of spirit to finish your operation.

Having gradually projected or thrown in all your powder, you will part your bolt-head, and directly stop it up close with a stopple of moist linen, and lay it aside in a cool place, to give the spirits time to condense in the water, that they may be afterwards extracted by the reiterated rectification and dephlegmation.

When



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When your spirits are well dephlegmed and rectified several times, you will keep them with care and attention in strong glass or crystal flasks, well stopped with wax, in a cool place, that nothing may evaporate.

After having parted your bolt-head, and left the retort to cool a little, you will take out the matter; all that is risen to the top and neck will be like threads of silk or cotton, and what remains at the bottom will be ashes: you will collect the whole, and beat it together in a marble mortar, with a glass pestle a little heated: take care to grind and powder your matter just out of the retort, for if you suffer it to take air, it will turn moist. Pass your powder through a fine sarse, and prepare apart double its weight of chalk of champagne, very neat and dry, in a fine and sarsed powder, to stratify with it your powder of antimony in a strong crucible, which you will cover with a lid perforated a-top, which you will lute all round, and fasten to the crucible with an iron wire.

Thus put the crucible in a circular fire, which you will graduate every two hours for eight hours; for the last hours the crucible must be surrounded and covered with live coals, which you will leave to spend of themselves, before you remove the crucible.

Your crucible being cooled, you will open it, and separate with exactness the chalk from your matter, which will be reduced to thin flakes of a yellow purple, which you will

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beat

beat in a marble or glass mortar, and put the powder into a bolt-head ; pour on it gradually good distilled vinegar, ten times the weight of the powder, leaving three-fourths of the bolt-head empty ; lute on its capital and recipient, and put it in balneo mariæ in digestion for four-and-twenty hours ; afterwards filtre your liquor a little warm, and drop on the filtered liquor fresh vinegar, to precipitate a combustible and arsenical sulphur ; filtrate afresh this liquor thro' paper, and this impure sulphur will remain in the filtre : put this filtered liquor into a glass body in balneo mariæ ; draw off, by distillation, all the vinegar to dryness, and there will remain at bottom a white and sparkling salt of an acid taste, and almost aluminous : it is a true salt of antimony, of infinite virtues for the animal kind.

Take this salt, which we shall call neutral, and putting it in powder into a bolt-head, you will pour on it all the spirit which you have drawn off by the retort : thus rectified and saved, leave it for twenty-four or thirty hours, in a vessel well stopped without fire, moving and stirring the matters five or six times for that space of time ; after which you will distil, by the body in balneo mariæ, all this mercurial spirit, till the matter remain at the bottom of the vessel in form of a clear honey ; rectify and dephlegmate the mercurial spirit you have just drawn off, and let the salt, left in form of honey at the bottom



tom of the vefſel, dry entirely in the ſame body, but in a boiling heat, ſo that this ſalt may come to be very dry, highly white, ſparkling, and ſhining even in the dark.

This antimonial neutral ſalt, is not only ſovereign in the radical cure of ſcrophula's, but beſides in the relief and cure of all ſorts of diſeaſes. The doſe is from two to five grains, for children at the breaſt; and for grown men, from eight to fifteen grains, according to the ſtrength and temperament of the perſon, and the quality and ſtage of the diſtemper under cure; the time employed in it, is more or leſs in proportion to the diſeaſe; there is none ſo inveterate, as to ſtand out beyond the fifteenth taking or doſe; and often one, two, three, four, or five takings, ſuffice. There is not in nature a ſtronger and more infallible counter-poifon, nothing which ſo effectually retards the approaches of old age, which ſupports and repairs it. Twice a year, once in the ſpring, and once in autumn, one or two takings each ſeaſon, ſuffice to maintain health and the natural vigour.

This ſalt is taken of a morning on an empty ſtomach, but if the caſe be urgent, it may be taken at any time, in all ſeaſons, in good broth, good old wine with a little ſugar, if you have any at hand, in cordial waters, or in vehicles appropriated to the diſorder.

*Topical remedies applied externally.*

When scrophula's are ulcerated, in what part soever of the body the ulcer lies, you must inject it with a small syringe, wash or deterge it, or anoint it with bolsters with the tinging oil of arsenic, mixed with the oil of sulphur, in which you will dip lint, and apply it on the ulcer if possible, and over it lay an emplaster of our solar balsam; the wound is to be dressed two or three times a-day; as much of the tinging oil of arsenic to be used as is necessary; the case and circumstances must direct us here; after which our solar balsam will suffice to consolidate and perfectly cure the ulcer.

*The composition of the fixed and tinging oil of arsenic.*

Be provided of crystalline arsenic perfectly well purified and dulcified by sublimations, and fixed by nitre, at lengthedulcorated by distilled rain-water; powder your arsenic in a glass vessel, and imbibe it by dropping on it, till you have reduced it to a soft paste, some of the water of sal armoniac dissolved by the cool moistness of a cellar; mix an equal weight of oil of tartar; put this paste into a bolt-head, which you will stop and lute very exactly, and which you will digest for twenty-four hours, and grind on the marble as the first time: re-imbibe, digest, and powder two times more; after these four imbibitions



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imbibitions and desiccations, put the powder, well dried and very fine, in a new and staunch bolt-head well stopped, which you will put in the heat of horse-dung, or in sawings of wood in a vapour heat; your powder will there, in a few days, resolve to a water; then remove the bolt-head from the dung or bath heat, and place it on warm ashes, where the matter will coagulate; replace it in the dung or bath heat, and coagulate again by the ashes, and this you will repeat five times in all, which will reduce, without further trouble, your fixed arsenic, and melting, like wax, with the least heat, will turn to the form of a salt in the cold. In this state you will put it into a body, and pour on it an equal weight of the true oil of sulphur, made in the manner which Le Fevre and Lemery teach. The body should be covered with its capital, and, all well luted together, be placed in balneo mariæ, of a moderate heat, there to be left for twenty-four hours, in order to combine them by means of the heat and circulation, and afterwards use them in the manner mentioned, as a sovereign remedy, speedy, gentle, and efficacious.

### *The regimen to be observed.*

An abstinence from all manner of gross foods, as beef, pork, hare, woodcock, and the other black, salted, smoaked, or pickled meats, is to be observed; all sorts of fruits, brown bread too heavy and too much lea-

vened, milks, gross wine, and crude waters, are to be avoided; the exercise to be moderate, the air we breathe to be pure and dry, and the belly to be kept open.

If the patient find himself oppressed and extraordinarily heated, he may be drawn a little blood, and made to drink for some time a little whey, as for instance, for eight or ten days, into which shall be put some grains of our sal martis, and afterwards he may be purged with our aurific pills; he may also be prescribed viper broths, and best of all our essence of viper, taken in a decoction of china-root and sarsaparilla, to attenuate the languid, creeping humours, and expel them by transpiration. In the course of using these remedies, the bed is to be kept some hours longer, and the patient to be better covered than common, to provoke a gentle breathing: at last our sal martis may be preferably used instead of chalybeate waters, which are usually prescribed; because it will certainly be much more salutary and efficacious, and be never subject to the uneasy symptoms which these mineral waters may cause; which might be very easily shewn to conviction.

But in regard to infants, and especially those at the breast, objects I ever have a great tenderness for, and which claim my most serious attention, I allow we cannot venture to tamper much with them; yet they may be purged with good effect every



fifteenth day, with a few grains of our pills; they may be made to take, at proper intervals, some grains of our neutral salt, to be put into a dish of coffee with the nurse's milk, who, directly after swallowing it, shall put the nipple into their mouth, and make them suck a little. You may, and you also ought to cause them, take a few grains of our sal martis, with the same precautions hinted at in taking the neutral salt, either in an ordinary dish of a simple decoction of china-root: but above all, what care, what attention, what solicitude, should not be employed, and not, as is generally done, at hazard, to procure good nurses for them, whose milk is fresh, and capable, by its liquidity and goodness, to maintain the strainers open and free.

But when they are come to be a little bigger, the doses are to be larger, and the treatment methodical; and by means of our remedies, and God's blessing on them, we shall with certainty come not only to prevent the suppuration of the scrophula, and obviate a slow fever, a marasmus, and other symptoms, but effect a radical cure agreeably, without pain and uneasiness.

#### C H A P. VIII.

WE have, in the preceding chapter, when treating of scrophula's, established it as a certain principle, that all tumours, all ulcers have, as their efficient cause, the excremen-

titious parts, and preternatural salts, separated from the natural balsam by our animal spirits; it thence follows, that the sole diversity of these recrements, or these salts, or their different combination, constitute the different species of tumours or ulcers, which affect the several parts of our bodies, and form their greater or less malignity, of greater or less danger; and render the cure more or less tedious, of greater or less difficulty. From the same principle we also easily derive the knowledge of the remedies proper in the cure of each of these diseases, and the manner and season of application; as it is evident that the only means of coming to a perfect and radical cure is, to destroy and remove the internal cause, the efficient of these ills; and till the cure is compleated, to assuage and diminish the violent and painful effects which these cruel enemies make us feel, by opposing them with proper remedies, both internal and external; so that our principle once laid down, there is the less need of pompous reasonings to establish the nature, and discover the cause of all these different evils, any more than to find which are the proper remedies, either to a cure or an alleviation: a few instances will verify this truth.

#### A R T I C L E I.

##### *Of the cancer.*

The cancer, which in its beginnings appears sometimes but like a small gland, or a  
vascular



vascular substance tumified ; at other times as a small tubercle, which rises above the skin ; and again, as a simple efflorescence of the dull and insensible epidermis, becomes however afterwards one of the most terrible and frightful of diseases.

It is, therefore, of great importance to be well acquainted with its nature, to distinguish well its several stages, be upon our guard against its insidious beginnings, to be able effectually to succour the patient, by administering the proper remedies ; which requires all the attention of an able and experienced physician.

The cancer is owing only to an excrementitious, earthy, tartarous, and sulphureous salt, which by its excessive calcination has been exalted to an extreme causticity, and has acquired an arsenical malignity, which is animated by the corrupted and arsenical spirits, such as are those which produce the carries and corruption in the earths, and stones in subterraneous places, where arsenic and realgal are generated ; from the earthy, tartarous nature of this salt, which is the cause of its great fixity, arises the fixity or stubbornness of the distemper, and the difficulty of removing it. From its sulphureous nature, calcined to a degree of excess, arise the causticity, and the acute pains which the patient feels ; from its arsenical nature proceeds the mortal malignity of the ulcer. In fine, from the combination and action of the corrupted

rupted spirits, which hold these salts dissolved, arise the several stages, the communication, and the extension of the ulcer upon the parts contiguous to that which was first affected, and renders this ferment so subtle, and so specifick, that how little soever remains of it, the disorder recommences, and the ulcer is re-produced with more violence and malignity, so as to become incurable.

The infallible remedy for this cruel evil is, as may be conceived, in the first place, a regimen and mild aliments, of a good juice and easy digestion, not earthy, tartarous, saline, gross and viscid, but light and spirituous; then the patient must be purged from time to time with our aurifick pills, blooded once or twice copiously, if his strength shall permit. Lastly, and here lies the true point of the cure, our quintessence of mercury, or that of antimony, must be used; to which may be added, very salutarily, some drops of that of the human blood or flesh. The quintessence of mercury will be also applied externally on the ailing part, or the quintessence of common salt, and afterwards our solar balsam.

What we have just said upon this article ought in reason to suffice to give a just notion of what is proper to be done for the cure of the cancer; and yet what desire soever we may have to be short and concise, it is a thing too important, to set forth the abusive use of incisions and cruel amputations,  
either



either of the breast, or other glandulous and vascular parts, where commonly this redoubted distemper is seated, to be able to pass them over in silence.

We have shewn that the ulcer is produced by a tartarous, sulphureous, arsenical salt; to this we add, for greater clearness, that this salt is conveyed into the part by a vehicle, which abounds in spirits; but that these spirits being tainted and arsenical, the ulcer can never be cured by the knife or the fire, by amputation, or the application of violent causticks; because these spirits, which hold the salt dissolved, convey it with vigour into the smallest and most secret sinus's, not only to the part affected, but all around it, extending and insinuating, imperceptibly, into the contiguous parts, in a manner that, when by amputation the sensible putrefaction, or the part visibly and actually corrupted, is extirpated, we imagine, but falsely, that the cure is compleated, and so much the more, as the flesh comes well, the wound is closed, the cicatrice is laudable, and other apparent signs of a cure are observed; fallacious signs, vain appearances all! because the ferment which the spirits have extravasated, that is to say, conveyed into the neighbouring flesh, of itself sound and good, though in small quantity, causes at first no alteration therein, and can effect nothing till it has fermented, and is become multiplied and increased; then unhappily it acts with more force, and its  
action

action is more dangerous, not only because its malignity is heightened, but also being more confined in a fleshy and spongy part, as are the glands and the flesh extirpated by the operation; it spreads at large, runs, or falls foul upon another part, which it spares no more than the first, where it cannot be pursued by chirurgical operations: besides, we should no longer find in the patients, who infallibly come to have a relapse, the same dispositions to be able to stand the efforts of new remedies, after having undergone the pains of amputation, and the fatigues of dressings.

The anatomists, or more properly the operators, may pretend to extol the success either of amputations, or of catheterics, yet they have never succeeded but in the cure of false cancers and tumours, or of concretions neglected, or made stubborn by remedies ill administered, and not of genuine cancers: for it is certain, that when this operation is performed upon true cancers, and even on subjects, in which age, temperament, strength, resolution, and all the most favourable circumstances, may flatter both the patient and operator with a very happy success; yet it ever happens, either that some have perished in the course of the treatment, or that others, though cured in appearance, have for some months after undergone cruel relapses, notwithstanding the most prudent and best concerted measures have been taken; and after



these false or palliative cures, every thing that wisdom could suggest in order to prevent these fatal returns, and guard the patient against them, has been observed. For this I appeal to daily experience, which justifies this fact but too much ; and this is the reason that Hippocrates, in aphor. 38, says, that it were better not to meddle with the occult cancer, that is to say, the true cancer.

The malady here is not simply local, but an internal one, which cannot be absolutely cured, but by removing the antecedent cause, which carries off with it the conjoint ; and it is only by the remedies which I have directed, taken internally, that one may justly flatter himself with success, and not by cruel amputations, which serve only to irritate the evil.

## ARTICLE II.

### *Of the gangrene, or sphacelus.*

We may use the reasons of the preceding article, in what regards the cure of the gangrene, without incisions or amputations.

Of all the evils with which mankind may be afflicted, there is none more difficult to conquer, than that which exhibits either upon a part, or upon the whole of the man, death in its true character, by suppressing the natural heat, and hindering the spirits from breaking forth and performing their salutary and benign functions,

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This effective and real mortification begins with an inflammation, whose different causes, both internal and external, make it degenerate into a gangrene, every time that the sulphureous parts of the nutritious juice being coagulated and fixed by the acid of the lymph, the nervous fibres are so compressed, that the spirits can no longer flow into them; and then these very fibres, no longer receiving the ordinary influence of these spirits, lose their spring, at the same time collapsing upon each other; and the saline particles being no longer able to issue from their pores, lacerate them by the motion they receive from the subtile matter; and it is this which causes that remarkable putrefaction, the first signs of which are a flabby soft flesh, to which succeeds the livid and leaden hue; to this again a blackness, stink, and insensibility. And this is what forms the gangrene, which is also called sphacelus.

There are commonly allowed two causes of this affliction, the one external, the other internal; among the external are reckoned wounds, ulcers, contusions, excessive cold, excessive heat, long tedious diseases, and long detentions a-bed, the languid flow of the urine, and other the like symptoms.

The principal of the internal, are a sinking of nature, a considerable alteration in some one or other of the noble parts; or when the gangrene has got into one of the three  
venters



venters or cavities: all these causes prove mortal.

But by supposing that the mass of the blood is impregnated with parts acrid, saline, joined to a bad sort of sulphur, in such quantity, that the spirits are of a superior force, to be able to subdue and discharge them by a strong fermentation, and a vigorous expulsion; there can be no difficulty to believe that nature, then being about a crisis, as in the plague or small-pox, will pursue that strange, heterogeneous matter, by removing it towards the habit of the body; or by collecting it on a part, will there produce a mortification, excepting that this matter cannot produce in the mass of blood a gangrene, because dispersed and diffused therein: besides, that it will be also opposed by the pure spirits, whose mild and balsamick nature corrects the acrimony of the juices, in the same manner as spirit of wine dulcifies aqua fortis.

From this we must conclude, that if nature, which has always a tendency to its own preservation, be assisted by good internal remedies homogeneous thereto, in a word, by such as we give; the cure of both these gangrenes will be effected without the necessity of any incision or amputation, unless the part be pendulous, or almost carried off by some blow, or a gangrene.

The probable reason I give for it, is founded upon either the strength or weakness of the patient, or the wounded person: if he is  
vigorous

vigorous and able to go through the operation, there is no convincing argument, but that he may be cured without undergoing that operation, since we daily see wounded persons survive the refusal of their submitting to it, at the sight of the ghastly apparatus which is commonly made on these occasions; these persons have been cured with good remedies. But if, on the other side, such as are not found to have sufficient strength to undergo the operation, die under it, this just consequence may be drawn, that the gangrene was internal, and had reached the noble parts.

Experience hath taught me, by every thing I have seen, either in the hospitals or elsewhere, that all those who have stood out an amputation, I mean, who have bore it well, after having undergone the rudest shock that could well be borne, as to shake the foundations of life, were the ablest and most robust; so that, I think, I may conclude, that whoever has been cured by means of amputation, was supplied with what was necessary to avoid it, and to be cured without it.

This very experience has made me observe, with pain and regret, how many wretches expire in the hands of him who performed that cruel and painful operation.

Now how much more advantageous may it be supposed, to have remedies which cure without recourse to that extremity of operations by the knife; and such are those I

now,



now, with pleasure, communicate to the publick.

ARTICLE III.

*Of fistula's.*

Fistula's have no other cause than an excrementitious, nitrous salt, which sensibly appears by the form of ulcers, cavernous, long, and pyramidal; they are cured by the oil or essence of mercury, preceded by some antimonial purgatives and a sudorific, as our antimonial and mercurial bezoar; to which shall be added a little of the essence of pearls and ambergris. After these internal remedies, we must come to topicks, in order to procure a firm and durable cicatrice: for this end, the sweet oil of mercury, and the red oil of antimony, and the other remedies which we have given, are sufficient: and in this manner you will reason and behave, in order to attain to the knowledge and cure of all the other species of ulcers.

ARTICLE IV.

The œdematous, or scirrhus tumours, which are hard, petrescent, and generally indolent or insensible, not making themselves felt but by their weight and bulk, arise from tartarous recrements, which are nothing other than the useless marck, which is foreign to the nutritious substance of our bodies, which our natural balsam separates and expels into the common emunctories, to

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be discharged by the natural excretions, and which, almost deprived of all spirit, become coagulated and petrified by the power of the salt with which they abound. From the defect of spirit, arises the indolence of these tumours, and their difficulty of resolution and suppuration; but these tartarous recrements, may be either simple or compound, and thus produce tumours either simple or compound; the simple are those arising only from one of the principles of nature, either salt, sulphur, or mercury; the compound, those arising from the mixture of the recrements of two of these principles, or of all the three. From hence we may understand and explain the nature and cause of the gout, the rheumatism, ischiatick, stones, calculi of the different viscera; of each of which we shall speak in its place, in a very circumstantial manner, and according to our principles.

There are, besides these species of scirrhus, petrescent and hard tumours, œdematous, or soft, cold, insensible tumours, and of themselves insusceptible of suppuration, as ganglions, bronchocele's, &c. They equally proceed from excrementitious parts, which our natural balsam separates and expels from the parts it cherishes; but they are not tartarous and earthy recrements, as those we have just mentioned; they are aqueous, phlegmatick, mercurial recrements, or the pure phlegm of natural mercury, which by this defect and privation of spirit, remains without



without action and without any motion, and which not being pushed strongly enough outwards by the heat, and the natural spirits of the part, which is almost unprovided thereof, becomes accumulated, fixed, and coagulated; from whence is formed that softish and insensible tumour, which grows big without pain, and without coming to suppuration. Of this species of tumour, there are simple and compound, for the reason adduced above; for the three principles have volatile and phlegmatick recrements, as there are fixed, tartarous, and earthy ones.

The cure of the simple, as of the compound, depends on the regimen, the aliments, and the medicines employed, both internally and externally. The regimen should be simple, gentle, and regular, the aliments hot, subtile, and full of spirits; a good white-wine be used, and good broths, into which is put some drops of cinnamon-water, or in the wine anise-bread, good juicy meat, seasoned with spices, cinnamon, cloves, nutmeg, &c. nothing crude, no fruit, no milks, no salad, but every thing to absorb this phlegmatick, cold, and crude humour. As to internal medicines, purges of the powder of antimony and mercury perfectly edulcorated, and the sudorifick made by the detonation of nitre on the same powder, and perfectly edulcorated also.

The dose is to the quantity of a dram in carduus benedictus water, keeping in bed

well covered, the patient there to wait and resign himself up to copious sweats. As to topicks, of which necessarily use must be made, to be able to dissipate the tumour by insensible transpiration, or at least make it come to suppuration. You may use either the spirit of wine perfectly dephlegmated, or the oil of tartar, or the essence of rosemary or sage, or the oil of philosophers, as it is called, made in the ordinary manner; but with the oil of petrol, or pitch, or turpentine, with which you will imbibe red-hot bricks; afterwards to distil the oil by a strong fire.



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# T R E A T I S E

O N

## V E N E R E A L M A L A D I E S.

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### B O O K I I.

*Containing a method for making divers perfect quintessences, both of the animal, the vegetable, and mineral kingdom, for the radical cure of the most dangerous and obstinate diseases :*

*And particularly for the cure of scrophula's recent or inveterate, internal or external, ulcerated or not ulcerated; and for every sort of ulcer, tumour, scirrhus, fistula, cancer, phlegmon, bubo, tetter, leprosy, &c.*

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### C H A P. I.

*Quintessences extracted from the animal kingdom.*

**P**HILOSOPHERS have distinguished all sublunary substances into three kingdoms, animal, vegetable, and mineral : from each one of these three kingdoms, may per-

fect quintessences be drawn, and an universal medicine for the conservation of health and the prolongation of life.

This is so important a subject, as necessarily to require a very extensive dissertation: but as I have sufficiently explained myself in another place on this head, and shewn that chemical remedies are better than, superior, and preferable to, vulgar and galenical remedies, I go on in train, in order to avoid every degree of prolixity, and the saying things over again, to give proofs and samples of it, by means of quintessences drawn from the three kingdoms hereafter described.

And yet what desire soever I may have to abridge, I cannot help relating what is mentioned about M. Cran, first physician to the elector of Brandenburg, which makes for my subject. This celebrated physician, raised to that dignity by his uncommon merit, drawn from Leyden, where he had professed and practised chemistry in the university of that city for thirty years running, with a great deal of reputation, having excellent remedies, which he was not ashamed to administer with his own hands: this illustrious physician, I say, was no sooner installed in his dignity of physician to the elector, than he made a separation of the good and bad, by retrenching from the dispensary and hospitals of his Electoral Highness, all superfluous remedies, as diaprurnums, diaphœnicks, juleps, apozems, epithems, with the whole trumpery of  
of



of boxes and gally-pots, serving rather for the ornament and trappings of an Apothecary's shop, than for the health of man; replacing them with some specificks, particularly in the violent diseases, which would take up no more room than the shop of an itinerant pedlar.

We might possibly stand in need of a like reform, because besides the good œconomy in it, we might find resources by it not to be every day met with in the common trash of the shops.

Riverius, first physician to Henry IV. said, that the doctrine of Hippocrates and Galen was admirable for the pathology, and profitable for the shops, but that the precepts of Paracelsus were good to follow, on the score of their truth, subtlety, and œconomy. I forbear mentioning what M. de Sulli says in his memoirs, p. 359, on the religion of this physician, which I look upon as a stroke of satyr and calumny, foreign to my subject.

To these anecdotes I might add, the daily abuse which is made in the distribution of remedies at some merchants, which are called druggists, with whom every thing, so to speak, is confounded and put in the same balance, butter, cheese, lard, herring, &c. with the medicinal drugs; and yet I am persuaded, that the T— and M— sell more medicines in a day, than the Bolducs, Geofroy, and Masson, able apothecaries, in a month: these are abuses, at which I cannot



but grieve, though unable to remedy them; I shall therefore give my quintessences in a very methodical manner, without reserving to myself what is called the flight of hand, an invention devised by most authors, thro' an excess of self-love, a thing I greatly blame.

*The quintessence of the human blood.*

Take human blood let from May twenty to June twenty, or from August twenty to September twenty, or about that time, the sun being either in gemini or in virgo: observe, moreover, if possible, the time when in these signs mercury is in conjunction with the sun, or at least in trine aspect (these observations are highly important, because in the time marked, the influences or superior spirits, which come from these stars, are very analagous to ours, and they join them in a perfect manner, and augment their force and virtue). We must, above all, attend that this blood be let from the sound, and young, but made men, of a square stature, strong and vigorous, and there must be enough of it, to be received in very clean silver vessels, or at least glass, to be kept in the shade till, after coagulation, it has thrown off of itself its serosity, which you will decant off, and throw away, saving only the pure blood coagulated in form of a mushroom: take care to keep your vessel covered with a paper, or a fine linen, that neither dust nor dirt, nor any other thing may fall into it.

Take



Take of this coagulated blood, and separated from every serous humour, five pounds at least, which you will directly mix with ten pounds of the best spirit of wine, alcoholized and perfectly dephlegmated, in a large strong glass bottle, which you will stop, and stir and agitate long and strongly, that the blood may dissolve, and mix, and unite entirely with the spirit of wine.

Cause to digest this matter included in the bottle, very exactly stopped, to prevent the exhaling of the spirit, for five or six days, in the heat of a *balneum mariæ*, or of lukewarm ashes, till the spirit of wine is perfectly tinged, and the blood well dissolved and united to the spirit. Observe, and take care, that the degree of heat in this digestion be not too violent, and exceed not that of the natural heat, otherwise the blood will bake and coagulate strongly, instead of dissolving.

When, after this digestion, your blood shall be entirely dissolved, and your spirit of wine well coloured, you will fit a capital to the bottle, and a recipient to the neck of the capital, in order to separate the spirit of wine, and distil, by a very soft heat, till the drops, which fall, begin to blanch and become milky; then you will shift the recipient, and gradually heighten the fire from one degree or two, till the distillation ceases. The distillation ceased, you will still encrease the fire, in order to cause to ascend to the top of the capital, a salt whiter than snow: collect,  
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in a neat manner, this volatile salt, and add it, in a glass vessel, to the milky water which has distilled before the salt: stop up your vessel, and save this salt, and this milky water, till the time of adding them to the other principles.

After this volatile salt is ascended, there remains at the bottom of the vessel a marck or feces, which contain a very valuable substance, the fixed salt and the tincture, or the sulphur of nature, which you will draw from these feces, or marck, by calcining them in a very strong open fire, till they are become a calx or white ashes; and making use of the pure phlegm of wine, rectified by three or four distillations, you will draw from these white ashes the fixed salt, proceeding in the following manner:

Take these ashes calcined to whiteness, and powdering them in a silver or tin basin or dish, not copper though tinned, you will pour upon it of the pure phlegm of wine, in a large quantity, in order to make all boil for an hour or more, and in such a manner that there may be always a sufficient quantity of liquor, to be able to extract, and become charged with all the salt. This ebullition ended, and the liquor cool, you will pour the whole into a large tall bottle, that the feces may settle and fall to the bottom; after which you will take all the liquor, decanting off clear, or passing it thro' a filtre of grey paper into a glass body, to distil to dryness:



ness: take the salt, which shall remain at the bottom, and calcine it afresh by a very strong and violent fire; afterwards dissolve it, and make it congeal as before, which you will reiterate again; that is to say, calcining by a strong fire, dissolving in the pure phlegm of wine, filtering and drying till your salt be extremely white, pure, clear, and transparent.

Put this pure salt into a good staunch bolt-head of glass, or a philosophic egg, which you will stop up and lute exactly, in order to be exposed to a reverberatory fire for fifteen days or more, and till it has acquired a beautiful red colour; cause to dissolve this brown salt, thus tinged and coloured, in spirit of wine, which you have above separated from the blood after its first digestion, and before ever the milky drops come over: digest, very softly, your solution, till the spirit of wine be well tinged and coloured; decant or pass thro' the filtre this coloured spirit of wine into a glass body, and distil by balneum mariæ, by a very soft degree of heat, every thing that can distil; you will afterwards add to the tincture which remains at the bottom of the body, the volatile salt in solution and union with its milky water, which we directed above to be saved: but before making this union, you must purify your milky water, united with the volatile salt, by seven distillations and rectifications.

After this union shall be thus made, you will cause to circulate the whole in a proper glass



glass vessel, in a very soft ash-heat, and every eight days you will put a capital on your circulatory vessel, in order to separate the aquosity which may distil off, which aquosity or phlegm you will save apart with care, as being a sovereign secret against every affection and disorder of the eyes. When you shall have thus drawn off, at several times, all the aquosity, you will have at the bottom the genuine and perfect quintessence of the human blood, which is the grandest secret in nature, for the conservation of life and health, the reparation of the strength, the increase of the radical moisture, and the cure of all diseases, both in general and particular. It is the most analogous and sure specifick for the radical cure of scrophula's, and of all malignant ulcers, cancerous and leprous, especially if, in order to heighten its virtue, you add to it a metallic quintessence, either of gold, or mercury, or antimony.

The volatile salt of the blood, extracted quite alone, as we have just taught, and sublimed a number of times, afterwards fixed to a perfect redness at a lamp heat, in a glass egg hermetically sealed, is a secret as valuable as general, and almost as efficacious as the above quintessence, especially if to it be added a little of the metallic quintessences which we have hinted at, or other specificks in particular diseases.

The dose is to a dram in cordial waters of cinnamon, anise, &c. in broth, in treacle, in plague-time, of a morning, fasting.



*A quintessence drawn from human bones. An infallible specific in the caries of the bones, and for curing the gout and rheumatism, and quickly assuaging pain.*

Take human bones unburied, and exposed to air and weather, day and night, summer and winter, for a year at least; being pounded, after cleaning them well from all filth or dust, if there is any, you will put them into a dish or earthen pot, and moisten them well from time to time, for eight or ten days, with good strong-bodied and spirituous wine: put these bones, thus imbibed and moistened, into a proper earthen vessel, in order to distil, per descensum, their oil, which you will afterwards rectify, by seven distillations, by the retort, in the view of giving it more strength and penetrancy. As to the feces remaining at the bottom after distillation, through defect of oil, they must be calcined to whiteness by a very violent degree of fire; and from these ashes the fixed salt must be drawn, by distilled water of dwarf-elder. After having purged this salt, in the common manner, by the same water, till the solution be pure, and without feces, or atoms, which muddy it; it must be added to, and combined with its pure oil. This intimate and perfect union will easily be accomplished, if the salt and oil are well and perfectly depurated. If we could observe, for effecting this union, the time when the sun enters aries,

aries, which happens yearly between the twentieth and twenty-second of March, so much the better, and the remedy will have more force and efficacy, because that at that time, all the solid parts of the human body have more spirituous juice and radical moisture; and that besides, the sign of aries, which has a kind of analogical dominion on the head, from the bones in some measure deriving their origin or their force, and their nourishment through the spine of the back, communicates to them by the force of its irradiation, when the sun is in conjunction with it, a stronger and more efficacious virtue.

This quintessence should be carefully kept in crystal flasks, and you may consider it, and use it, as the most sovereign and most excellent balsam in nature, for curing and assuaging all the arthritic pains of the nerves and joints, for removing or preventing the caries of the bones, and curing every vitious affection of them. It is applied lukewarm on the ailing part, after having rubbed it a little with the warm hand, and over it is laid a compress. If it is in order to cure the gout or rheumatism, purging three or four times with the mercurial spagirick pills must be premised, to which add some grains of the extract of hellebore.



*The quintessence of human flesh.*

Nothing is before, nothing more admirable, than the effects of this quintessence, which is on a level with that of human blood, for the conservation of life, the reparation of the strength, and the cure of almost all our diseases; but there are very few people who understand the genuine and due preparation of it, which we design to give in all its perfection, in order to make it a sovereign theriaca, which infinitely surpasses, for efficacy and virtue, all the theriacal compositions made from the flesh of serpents, precious stones, metals and minerals, and simples the most researched and elaborated; for every thing delights in its like, is supported, nourished, and perfected by that which is of its own nature, provided that what we take of our own nature be pure and incorruptible.

This purity and incorruptibility, necessary for accomplishing the re-establishment or conservation of our body, is communicated to human flesh, in following the method which we are going to prescribe.

Take about four or five pounds from the flesh of the thighs, buttocks, or loins of a young, sound, and vigorous man, dying a violent death, by sentence of the judge, and if possible, when the sun is in the first degree of virgo; that is to say, between the twenty and twenty-third of August; throw  
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this flesh into excellent spirit of wine perfectly dephlegmated, the spirit must float atop four or five fingers breadth, in a glass vessel well stopped, and the whole to remain thus for four or five days. After this time, you will remove the flesh from the spirit of wine, and putting it into a hollow glass bason, for instance, in a bell, you will imbibe it, by sprinkling it by little and little, and often, with a very good spirit of salt well dephlegmated; your bason should be put and kept always in the shade, under cover from rain, but exposed to the air, and uncovered, yet so as that no dust or filth fall into it, which may soil the flesh. After the flesh shall have thus drank up a large quantity of spirit of salt, it must be exposed to the air, in the shade, and in the same glass bason, there to dry gradually and perfectly, turning it from time to time. You may keep of this flesh thus salted by the spirit of salt, dried in the shade and powdered, which, without any other preparation, is of very good service for the conservation both of life and health. But let us now draw from it its perfect and absolute quintessence, in order to prepare from it that remedy we announced above.

Take then one or two pounds, or any quantity, at pleasure, of this salted and dried flesh, and reducing it to an alcohol or impalpable powder, throw it into spirit of wine in a good glass bolt-head; your spirit should be alcoholized, perfectly well dephlegmated,  
and



and so exactly and often rectified, as to acquire a very strong flavour, but highly agreeable and fragrant. Set it in digestion in a soft bath-heat for fifteen days at least, and till the spirit of wine turn red, and be tinged of the colour of blood; but apply all your attention to have your bolt-head perfectly well stopped with a good lute, that the spirit may not evaporate: then decant off all your tinged spirit of wine into a glass circulatory, whose junctures being very accurately stopped and luted, you will continue digesting and circulating for eight days by a very soft ash-heat, that all the feces may deposite, and make a sediment at the bottom. Rack off fine this tincture or coloured spirit into a new glass vessel, which you will stop well; and having collected the feces deposited at the bottom, and adding them to the first feces remaining after the digestion of the powder, you will draw off, by a distillation in a boiling bath-heat, all the humidity you can, which you will add to your tincture: then burn and calcine to whiteness, by a very violent degree of fire, all your feces, and extract from these ashes the fixed salt, with the water of carduus benedictus, or that of the flowers of the lime-tree, or of the lilly of the valley; purify this salt by very often repeated calcinations, solutions, filtrations, and coagulations, till your salt be brought to its utmost purity, white as snow, shining as crystal, sweet as sugar, and melting like wax. You will then



add it to your tincture, at last you will draw off from this tincture, by a soft solution in balneo mariæ, the superfluous humidity, till your tincture is thickened, and hath the consistence of run honey: thus you will have a perfect quintessence, which deserves to be kept in vessels of gold, on the score of its surprizing and wonderful effects, both for the conservation of health, and the cure of the greatest diseases. The dose is from three to four grains, every morning fasting, in a fresh egg, or some broth, or stomachick waters, and other vehicles appropriated and suitable to the occasions of the person who would use it.

*The quintessence of wolf's flesh; a specifick in the scrophula.*

Take ten pounds, or any quantity at discretion, of the flesh of a wolf newly killed, a pound of mineral arsenick, two pounds of the dry roots of the common arum, larch-tree, or the greater many-leaved dragon, half a pound of foot, and six pounds of lime-water; put and mix the whole together, after cutting in pieces the wolf's flesh, and beating and macerating the roots along with the flesh, and set to digest in a large glass bolt-head stopped, or putrefy in hot dung for a month or forty days; afterwards draw off, by a soft distillation, in balneo mariæ, all the humidity you can by that way; convey your alembick to the sand, and continue the distillation



tillation by a strong fire, and heightened much at last, to dryness; rectify four or five times all the distilled water in an ash-heat by the retort, and calcine the feces, by a violent degree of fire, to whiteness; extract the fixed salt from these calcined feces, with the water of the many-leaved dragon, or larch-tree, and perfectly purify it, in the common way, by the same waters, till the solution be clear and without any feces. After this, dissolve this purified salt in its own water, distilled above, and rectified four or five times; set in digestion, in a soft bath-heat, for fifteen days; and after this time, distil by the bath, with a slow heat, all the humidity which can thus rise, and what remains at the bottom, will be the specifick, and the quintessence of wolf's flesh, which you will keep in glass flasks well stopped, to be used as an infallible remedy, externally applied for curing and removing all scrophula's, and conducting, to a good and laudable cicatrice, all sorts of ulcers, malignant and phagedenick, in a very short time, by applying externally some of this quintessence on the ailing part: with this quintessence may be mixed some oil to soften it, and moderate the pain, which the action of this remedy alone sometimes causes; as either oil of bitter almonds, of the white of eggs, or of mandrakes, or, best of all, some of our solar balsam. This remedy cures also ganglions and the cancers, called *noli me tangere*.



*A quintessence or elixir drawn from the hart.*

Several able physicians have spoken with commendation of this elixir, and it is said that a prince of Germany maintained his youthful plight, tho' advanced in years, by the use of it. Every one knows that the hart may live for several ages together, consequently there may be extracted from it the principles of a life the most lasting; for this purpose, a hart is cut in pieces, the excrements are separated, the bones broken; the whole is set to digest, the distillation gone upon, and the phlegm and saline spirits are separated by repeated digestions, distillations, and cohobations; the mass remaining in the alembick, is put into retorts; at first there is drawn a yellow oil, and at the close another black sort, very stinking; the caput mortuum remaining should be calcined, to extract a volatile and fixed salt; from it an earth is separated, which must be purified, to be used for depurating oils, and taking off their stink. Repeated elaborations should be performed on each of these substances, till they are reduced to their elementary state, without any admixture of excrementitious matters. In this state of purity, the junction of all the principles should be made, from which there results a very fragrant, penetrative elixir, and of a singular efficacy for prolonging life.

This exposal would be more than sufficient for any one already initiated in the spagyrick



gyrick art, but possibly too succinct for those uninstructed in that practical science; wherefore we will give the process at large, such as M. Chambon, first physician to John Sobiesky king of Poland, of whom I have already, in this work, made mention, executed it himself, by adding to it some reflections which he made on the subject.

Take a live hart and strangle it; when cold cut it in pieces, and pound it in an iron mortar, bones, flesh, skin, entrails, and horns; put the whole into earthen retorts well luted, a third empty; leave all in this state till an odour comes forth, which shews the putrefaction to be beginning: then place the retorts on wind-furnaces, to which you will adapt large recipients or matrasses, which you will lute, and leave to dry before the operation; conduct the fire gradually, till nothing more comes over: this finished, let the matters cool, put those of the recipients into one vessel well stopped, afterwards break the retorts, and collect the salt remaining in the neck, which must be added to the distilled matter, and which was in the recipient: calcine in a strong fire, in an earthen pot well stopped, what remains at the bottom of the retorts, till the whole be reduced to ashes, which is commonly done in six hours time; beware of unstopping the pot, till the operation is finished, after which you must remove it from the fire, break it, put the matter on different pieces of grey paper in glass funnels,



funnels, and the funnels in glass bodies: resume the distilled matter, separate the phlegm from the oils and salts, which you will set apart. The distillation finished, pour the phlegm or water on the calcined matter, placed, as was said above, on grey papers; repass this phlegm repeatedly on this matter, in order to be charged with all the fixed salts it contains: this done, put your oils and salts into this lixivium, and the whole into a bolt-head, or in several small ones, with long necks, a third empty; suffer this mixture to rest, and when the water is become insipid, or devoid almost entirely of saltiness, with which it was charged, open the cock at the bottom of the vessel, to let this water run; if the vessel hath no cock, decant the water off. When the matter is well cooled, break the vessel, in order to remove this matter, which will resemble a soap, just taken from the boiler; it must be held in a lamp-heat for forty days, after which you will put this animal soap into glass or earthen pots, very neat and well stopped.

The use to be made of it internally, is as follows: you must purge, for some time, with the aurifick pills, and take a few glysters before, and even in the course of using it; of a morning, on an empty stomach, there are given from five to twenty grains, in six spoonfuls of a strong broth with spices; <sup>a</sup> you must

<sup>a</sup> To make the broth with spices, we ought to draw the extract of good partridges, good fowl, mountain birds, good old



must keep your bed for two hours, with more clothes than ordinary; the use of it must be continued till the health get the upper-hand, and be able to support itself. As to the external use of it, it is to be applied to ulcers; with it tumours, nodes, indurations, are to be rubbed till cured, by making the application twice a-day, heating it a little each time when applied; the parts, which are not open, are to be rubbed, to make it penetrate the better.

This remedy is so powerful, says M. Chambon, as to be superior to all those in common practice, and above all criticism. He assures us, that he makes the publick an unvaluable present, that he expected neither employ nor gratification for communicating it, tho' the operation hath cost him much trouble and expences. He, moreover, says, that this remedy deserves truly the name of a panacea; Liliū, potable gold; that it is a precious jewel, which can never be procured in Hippocrates or Galen.

B b 4

C H A P.

old pigeons, mutton, old cocks; to which add some of the flour of nutmeg, cloves, and even some viper; all meats of a strong juice, also aromattick herbs: but when you add some drops of the quintessence, at the time of taking it; and it is only used as a vehicle; it must not be too hot, for fear of evaporating, and it must be taken down at once.

## C H A P. II.

*Quintessences from the vegetable kingdom.*

**Y**OU must gather large quantities of black hellebore in the month of October, burn it, and extract from the ashes, with care and attention, the fixed salt, in the common manner, which we have taught in several places; and after purifying this salt, keep it till the other parts, which are to form the quintessence, are done and prepared. Gather also, in the same month, the root, the stalks, and the leaves of hellebore, and after clearing the roots of all the earth, and cleaning the leaves, you will bruise the whole in a stone mortar, with a good large wooden pestle, and you will express the juice by the press: after expression you will divide it into two parcels, keep one parcel in a glass or stone vessel, to be used, as shall be hereafter said; and of the other parcel you will take two or three pounds, which you will put into a glass long-necked bolt-head, and which you will stop well, to cause it to digest in a soft bath-heat for fifteen days, after which you will distil, by balneum mariæ, all that well can; cohobate the distillation on the marck remaining at the bottom of the vessel, afterwards pass the whole through the strainer, and put into the press what remains over, to express and have all the juice; cause to evaporate a little, but very softly, the humidity, for the salt, contained therein,



therein, to cryftallize in a cool place, where you will put in a pipkin all your cryftals, drawn pure, neat, and beautiful, and keep them for future ufe. From the parcel, which we faid was to be referved after divifion, you will draw the pure fpirits in the manner prefcribed, and with the attention and addrefs neceffary for a fkilful artift. Having drawn your fpirits, and having them pure and de-phlegmated, you will add to them the cryftals referved, and diftil the whole together for feven times, after which you will ftill add your pure fixed falt, drawn from the afhes of the hellebore, which you have alfo referved from the beginning of this operation: and thus you will have all the principles united, which you will keep in a cryftal flafk well ftopped, after adding a little fpirit of rofes, impregnated with fome grains of amber and mufk.

The dofe of this quinteffence is from a fcruple for old decrepid people every week, and for younger people once a month in broth, the yolk of a frefh egg, cinnamon-water, imperial-water, malvoify, old wine with fugar, &c.

Though this quinteffence be no fpecifick for fcrophula's and ulcers, as it is the beft of all thofe extracted from vegetables, for the reparation and confervation of the human body, it may be very falutary in all forts of difeafes, and thus deferve to be placed here, at the head of thofe which have a peculiar  
virtue

virtue in the cure of the malady which we have been upon.

*The quintessence of the greater and less centaury.*

There should at first be drawn the tincture of both centauries ; this tincture, which alone is a very gentle purgative in serofities, is drawn by the spirit of wine and vinegar of sulphur. Having this tincture pure, it must be kept in order to add it to the quintessence, which you will make of the whole plant, in the very way and manner just given for making the quintessence of hellebore ; that is to say, that after expressing the juice of the plant, leaving it to ferment, and drawing from it the ethereal spirit, entirely dephlegmating, and perfectly purifying it by several repeated rectifications, drawing the oil per descensum, rectifying it three or four times on colcothar, to take off all its empyreuma, and to purge it from its heterogeneities ; drawing the fixed salt from the calcined ashes, and perfectly depurating this salt by calcinations, solutions in its phlegm, and by the requisite filtrations and desiccations repeated several times ; you will combine these three principles by a soft bath-heat ; and the combination finished, you will add the tincture drawn from the flowers : and thus you will have a perfect quintessence, whose virtues are admirable, and almost universal, for expelling all the vitious and superabundant humours of the human



human body, healing every wound, every hurt, every internal ulcer, assuaging every pain, comforting and relieving every person of a weak state of health, and of vitious humours. The dose is to two drams of a morning on an empty stomach, keeping home, and a regimen in broth, fresh eggs, syrups, or water appropriated to the malady.

*The quintessence of the round-rooted birthwort and comfrey.*

These must be gathered in the spring, above all the roots of these plants, a large and nearly an equal quantity of each; bruise them, both roots, leaves, and stalks, and express all their juice by the press; put this juice into glass vessels, in a cellar, to ferment. After the fermentation is all over, and at a stand a little, distil by a very soft fire, in order to separate the ethereal spirit from the phlegm; continue the distillation, after drawing off the spirit, and shifting the recipient, to take off all the phlegm, yet without running the marck dry, which must be left moist. This phlegm will serve for extracting and purifying the fixed salt; cohobate the spirit which you have drawn, and which is in some sort dephlegmated, on the moist marck remaining at the bottom of the body; digest for five or six hours in a soft warmth, distil the spirit by a very gentle heat, and separate, as much as possible, the phlegm; cohobate a-new this distilled spirit on the moist marck



remaining at the bottom, digest for two or three days, and re-distil the spirit, dephlegmating it at each time, and leaving the marck not dry, which you will reiterate and continue doing in the same manner, till the volatile salt ascend into the capital: gather this salt very neat, after it is all ascended, and no more of it remains in the feces; and rectify it three or four times with its pure spirit, to which you will add it. Then, having a quantity of dry roots and stalks of these two plants, you will break and cut them in pieces, to extract the oil per descensum, in the accustomed manner: having drawn this oil, and parted it from the water, you will rectify it three or four times, or more if necessary, to take off its empyreumatick odour, by the retort on colcothar, which you will shift at each rectification. You will add to this pure oil flowers of mullein and St. John's-wort, which you will leave in the sun for a month; neatly remove these flowers, and express the oil, to which you will add fresh flowers of the same kind, for four or five times, expressing them always till your oil has got a beautiful red tincture. At last you will draw the fixed salt from the ashes of these plants, and purify it perfectly by solutions in its phlegm, by repeated calcinations, filtrations, and deffications: and when this salt is perfectly pure, as to leave no mote, no muddiness in the solution, and be very white, limpid, and clear, soft and fusile, you will add it to the  
other



other pure parts which you have extracted from these plants ; that is to say, to the spirit and oil, and you will make a perfect and substantial union of them by a digestion in a soft bath-heat. And if you would add to it oil of wax, incense, and turpentine, you will make the greatest, most perfect, and most excellent balsam of the vegetable nature, for the absolute cure of all sorts of wounds and ulcers, both simple and compound, recent or inveterate, internal or external. The dispatch, the mildness, and the perfection of these cures, may make it be considered as approaching to a miracle. This balsam is taken internally, according to the case, in appropriated and suitable vehicles, at any hour, according to the urgency of the case. It is applied externally, by mixing it with appropriated unguents, and hot, on the hurt or wound, after washing with wine and oil, and a tent of lint, moistened with the arcanum, is left upon the wound, with a compress and bandages over ; no simple wound but is cured in twenty-four hours.

*The quintessence of sea-cabbage or soldanella, a sovereign topick for resolving and discussing all sorts of cold and scirrhus, and quickly bringing to suppuration hot and phlegmonick, tumours.*

This plant, leaves, stalks, and roots, should be gathered in great quantity, in the spring of the year, because then it is full of juice,  
which



which abounds in a spirit and nectar of life: the plant must be first bruised in all its parts, and all its juice strongly expressed by the press; this juice is to be put into tight glass vessels in a cellar, there to ferment; distil afterwards, by a very soft degree of heat, the etherial spirit and the phlegm apart, yet without drying the marck, but leaving it fresh and a little moist; rectify and entirely dephlegmate the spirit by five or seven distillations; cohobate this pure spirit on the marck of the first distillation, digest by a gentle heat for some days; re-distil this spirit, and re-cohobate, till it has got out of the marck all the volatile salt, which will happen in the fourth or fifth distillation, when this volatile salt will rise with the spirit, and fasten white as snow, on the sides of the body, and in the capital. Lastly, add this volatile salt to its spirit entirely dephlegmated, and rectify them together three or four times, along with the fixed salt drawn from the ashes of the plant, and purified to the utmost perfection, as we have said and taught above. The substantial union will be accomplished by a fermentation for eight hours, in a lukewarm heat, and afterwards by a gentle digestion for fifteen days in ashes: you will keep this quintessence carefully in a glass flask well corked. It is proper in the cure of several diseases, and for purifying the blood when taken inwardly. The dose is from half a drachm to a whole drachm, for those of a good temperament,



a strong and robust constitution ; to be given in broths or syrups proper for the disease. This remedy must be taken very early in the morning, the patient must keep his room, and observe the proper regimen ; the remedy must be repeated some days after, if the disorder continue ; and if the disease be chro- nical, and of a long standing, it must be taken thrice a month. It is to be observed, that this remedy being often emetick, it may be softened, and this vomitive quality taken off, by letting very good spirits of wine cir- culate over it for ten or twelve days.

For discussing cold humours, dissolving scirrhus, and ripening hot and inflamma- tory tumours, the only rubbing it in exter- nally, is sufficient.

*A tincture of the flowers of the great dragon, a specifick for cicatrising scrophula's after they have been extinguished and cured inter- nally by the secrets of mercury, orpiment, or antimony.*

The herb dragon produces a large cubical and purple flower ; express the juice of this flower by the press, get a quantity of it, which put into one or more glass or stone vessels, together with a little leaven ; stop up the vessel close, yet not to be full, lest it break, and put it in a cellar to ferment. After fer- menting, distil, with a very gentle fire, or in a lukewarm heat, the ethereal spirit, which dephlegmate and rectify six or seven times : you will take fresh flowers, and pour upon them



them in a matrafs, where add thereto a little vinegar, or acid of sulphur, all your rectified spirits; you thus leave your matrafs stopped up close in a lukewarm place, but not over the fire or in the sun, for the space of a month or forty days; afterwards remove and exprefs properly the flowers, and add to your tincture not only the volatile salt, but likewise the fixed salt of the plant, which you will extract and purify in the common way, as has been said before in the other arcana.

By the same method may be got the tincture of other flowers, and all their virtue and odour be preserved.

*The quintessence of turpentine.*

Take one or two pounds of turpentine, the Venice turpentine is the best; mix it with an equal weight of very good spirits of wine well alcoholized, beat it for some time with a wooden spatula, till the turpentine be entirely dissolved and incorporated with the spirits of wine: when it is well incorporated, you will put it into a large strong glass matrafs, so that there may be at least the third part, or the half of it, empty; shake and stir the vessel very well, and for some time, until the liquor become like a white froth; then let it settle in a cool place, till the feces fall to the bottom and form a sediment. When all is settled, you will see the spirits of wine float a-top of all, underneath will be the turpentine dissolved into an oil of a yellow colour,



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colour, and under that will be a very white salt of the turpentine, which is to be separated and dried, and which is of a cathartick virtue, and a strong purgative; yet, however, without causing either heat, colick, violent effects, or nausea's, and, in short, without any danger or alteration. As to the spirits of wine and the oil, after mixing them together, let them digest in a lukewarm bath-heat for fifteen days, the vessel being stopped up very close and luted, that none of the spirits may escape. After this digestion, distil by an ash-heat, observing the different degrees of the fire. At first give it a slow fire, till the spirit of turpentine, together with the spirits of wine and the phlegm, come over in the distillation: then, after changing the recipient, heighten the fire, and the oil of turpentine will come over of a yellow colour; upon still heightening the fire, the red oil will come over; and continue the same degree of fire till the distillation be quite finished. Put both these oils together, the yellow and the red, rectifying them three or four times in a retort. As to the marck, or magma, which remains dry at the bottom of the cucurbite, you must reduce it to a fine powder in a glass or marble mortar, with a glass pestle, and pour upon it three times its weight of the spirit of turpentine that has come over in the first distillation, together with the spirits of wine. Digest it in a lukewarm bath-heat, in a vessel close stopped up for fifteen days, that all the marck

may be well dissolved: distil it afterwards in a very gentle ash-heat, cohobate that which has been distilled, digest it again, re-distil and re-cohobate it, &c. which you will repeat until the volatile salt rise with the spirits, and coagulate on the capital, in the form of honey, or go to the bottom of the recipient in the form of oil. As to the marck that remains after this distillation, you may calcine it, and reduce it to ashes, in order to get a little of the fixed salt it contains; but it has very little, because the substance of the turpentine is almost altogether sulphurous, and composed of volatile particles, that evaporate almost entirely in calcination; wherefore if one would have a fixed salt to add to the other principles, a quantity of this common resin must be burnt with the entire marck. After this, by our common method, the fixed salt, and even the volatile salt, being perfectly depurated according to art, will be in a condition to be added to the spirit and the oil; namely, the sixth part of the spirit, and the ninth part of the oil, both yellow and red, put together, and so to mix the whole, and keep it in crystal flasks well stopped, as an admirable secret, and of a surprising and sovereign virtue in chronical diseases, for the cure of the most obstinate, and the relief of such as are absolutely incurable.

*The quintessence of opium.*

There is no remedy in physick, that has been so much commended, and so much  
blamed,



blamed, as opium, either by the ancients or the moderns; Hippocrates made great elogiums upon it, and gave it the preference on all occasions. Pliny and Galen have found fault with it: Paracelsus, and such as follow his doctrine, have extolled it highly; and whole nations constantly use it. The Indians make use of it, not only in their diseases, and to dissipate their melancholy and anxiety, but likewise to procure their women joy and pleasure, which is so much the more agreeable, as with them it has always the relish of novelty, and which, without cloying, leaves them the pleasure of resuming it again.

The Turks likewise make use of moflac, which is no other than opium, for the same purposes and design as the Indians, and for animating them in battle, and for raising their courage. Lastly, experiments, a thousand and a thousand times repeated, and the happy success with which they have been attended, have confirmed its reputation, and established its use in physick, so that it is called laudanum; that is to say, it cannot be too much commended.

However, there is abundance of difficulty, inconvenience, and danger, in administering this remedy; not but that it is an excellent thing in itself, when well prepared, and properly administered; but this is rarely done; for it is a poison, and our greatest adepts have not perfectly known the right method of preparing it, either on ac-

count of the toasting they gave it, the mediums which they made use of, and the additions which they put in the composition of this remedy. Moreover, it is not thoroughly determined, that we have in Europe the true opium, at least there is room to believe that it is adulterated; we see no opium in drops or tears, and I question whether there be any. However that be, being obliged to use the opium which is brought from abroad, that which comes from Thebes, or Grand Cairo, is reckoned the best; you should chuse it heavy, compact, clean, glutinous, of a black colour, inclining to red, inflammable, bitter to the taste, and a little acrid; its smell should be disagreeable and soporiferous.

Instead of endeavouring to remove the difficulties which I have just shewn, and to make a good preparation of opium, in order to be able to administer it without uncertainty, danger, and always with success, people have fallen into frivolous questions, namely, whether opium be cold or hot? If they had analyzed it, they would have been convinced that this mixt is almost altogether sulphur.

From these questions, which have begot a vast number of disputes and writings, people have adopted a system and opinions as frivolous. For what reason, say they, is opium a poison? why is it soporiferous? Because, as they believe, it has particles figured in such a manner, as to stick to the particles of the vital or animal spirits, and embarrassing them,  
hinder



hinder their motion, and so bring on sleep. I sincerely avow that I know nothing of this jargon, and that I should know just as much of it, as if the somniferous power of opium were ascribed to an occult quality, which at this day is treated as ignorance.

No: I have no mind to give myself any trouble about knowing how its effects are produced, and in what manner opium brings on sleep; it is sufficient for me to know that it does so; I honestly declare, that I do not know any thing of it, and that whatever attempts I have made in my own thoughts to know it, I have not been able to succeed. By this avowal, I think, I merit the title of as good a physician as any of those who say things they fancy in their own heads, and say a great deal less than if they had said nothing.

But I ought not to be contented with finding out the faults of others, I ought to do better; and thus I should confine myself only to know, that opium has a somniferous quality, which the Creator of all things has given it; it is no matter how: I should only be concerned about putting it in such a state, as to operate well, usefully, and without any danger, or troublesome accident, as Vanhelmont says, *Felix æger cujus auxiliator medicus novit lethalia à papavere separare*; i. e. “happy the patient whose physician knows how to separate whatever is mortal from poppy.”

We know how people are alarmed, when opium is proposed to be given, from the instances which we have of the misfortunes that have arisen from it often, when administered according to the common preparations, which are looked upon as the most infallible in the common pharmacy, a single grain of which can kill a patient; which shows that it is one of the rankest poisons, consequently this preparation is bad, much to be dreaded, and does not answer expectation, as not being founded upon true physics: however, there is not a remedy in the vegetable kingdom, that has a more energetical, more noble, or so infallible a virtue, as opium when well prepared; and that by the cures thereby performed upon people, from dispositions which often appear so opposite, that one would be tempted to say that there was an intelligent principle, as it were, in this remedy, to perform as it ought.

In fact, it is applied with success almost in every case, when one knows how to make a proper use of it, because when nature can recover a calm in any disease, more than half way is got towards the cure, and often without any other remedy, she alone performs what is proper to be done.

Nature never produces these effects, if she be not *sui juris*, and in a state of tranquillity, into which she alone cannot put herself, being too much agitated, confined, and almost vanquished. A dose of opium is given internally,



ternally, and it is applied externally; if it be well prepared, a calm comes on directly as it were by a kind of miracle, nature is re-instated again in her just rights, the spirits which were disordered recovering vigour, one falls asleep, sweats gently, and feels no more pain; it is a kind of magick, which produces a sort of atony, so to speak. Before I finish what I thought proper to say on the subject of opium, in order to express myself more accurately, I shall use the very terms given us by Paracelsus and Vanhelmont upon the same subject.

Vanhelmont says, that it appeases the irritations, seditions, violent commotions, inquietudes, rage, and fury of the archeus, or original principle, which is the chief director of life, consequently of health and sickness; so that it restores peace and harmony between the mover and its motions, in so effectual a manner, that after having gently appeased pains, it brings on a sweet agreeable sleep, which restores nature entirely, and re-establishes the strength of the poor patients, who are weak and languid, on account of the pain arising from inquietudes and watchings, which certainly is at least half the cure of a disease, what quality soever it be of; for, *somnus reparat vires, fessaque membra levat*, i. e. "sleep repairs strength, and relieves the fatigued body;" whence may be concluded, that *natura corroborata est omnium morborum medicatrix*; i. e. that "nature, being corroborated,

“ cures all diseases.” This is confirmed even by the text of Paracelsus, in his 7th book *de archidoxis*, in the chapter that treats of the specifick anodyne: “ There are several reasons, says this author, which have obliged us to speak of this specifick anodyne, because we have treated certain diseases, where all our arcana’s have failed us, except this specifick anodyne alone, which has produced marvellous effects, at which we have not been nevertheless surpris’d, because we know that water extinguishes fire, and this anodyne extinguishes diseases in the same manner, and that for several reasons, which we forbear mentioning; for that which rests and sleeps, does no harm even naturally: if therefore the paroxysm be laid asleep, it is not felt at all, its operation ceases, and is not perceived. Herein we have cause to comfort ourselves, that sleep makes a great deal of uneasiness, anxiety, and melancholy, to pass away unperceived. But here we must observe, that it is not necessary that the person sleep, but that the very disease must do so too.”

Though I have already proved, that fermentation should be a general and necessary preparation for all matters, I think it nevertheless of importance to acquaint, that it is indispensable, particularly for vegetables; there is however a little art to be used, and some distinction to be made, as to different subjects; where-



wherefore I have thought it of use to enter into a particular detail, by making the proper distinctions as to each; for instance, gums contain something refinous, that is hard to dissolve in water. I shall explain myself more precisely in another place, that I may leave no ambiguity, nor any thing farther to be desired for a perfect preparation.

Take fifteen pounds of dew gathered in the month of May, or rain-water, which you will distil; after that is done, you will take twelve pounds of it, which you will put into a good and strong matrafs half filled, into which you will put three pounds of good honey, called roi de Narbonne; your matrafs being stopped up close, and your water and honey being in it, put it in a stove, and let it ferment; after it has fermented, take three pounds of the distilled dew or rain-water, which you have had from the fifteen pounds above-mentioned, mix them in a very tight stone pan, take a pound of good opium, which you must beat very well in the pan where the three pounds of water are, and keep doing so till the whole be reduced to a pap or mash, with the water which dissolves at the same time what is soluble; warm that which is in the pan, and pour it into the matrafs where the honey ferments, and though that which is muddy do not dissolve at first, however the action of the ferment dissolves and purifies it by degrees, which excites a much stronger motion than the honey

ney alone can ; so you must put your matrafs in which are the honey, water, and opium, into a stove, until this new solution and fermentation be finished : after all is over, and in this condition, take a large glass cucurbite, place it upon an athanor in a sand-heat, without lighting the fire, put a glass funnel to this cucurbite, and with some filtering paper, carefully filter the matters in the matrafs : when you have done this, take the funnel away, and fit on the cucurbite its capital and recipient, luting the whole very close, and when the luting is dry, light the fire, distil with a graduated fire, and draw off all the spirits that have the taste of opium : when no more spirits rise, let the fire go out, let the vessels cool, unlute the recipient, stop it up close, take the cucurbite, pour what is in it into a glass evaporatory, put it on an athanor in an ash-heat, and make all the phlegm evaporate with a slow heat, till it be of the consistence of a very liquid honey ; in this condition put the whole together, that which shall remain in the evaporatory, and the spirits in the recipient that are not rectified, to the end that the phlegm may dissolve the salt and the tincture of the residue ; shake and stir all these matters in the recipient, put it to digest with a very gentle fire, in an ash-heat, for three days together : after this digestion, solution, and union, filter your matters, rectify and draw off the phlegm by a gentle distillation in balneo mariæ ; by this means  
you



you will have the salt of the opium, which is sudorifick, united with its volatile sulphur, that produces a marvellous secret; which you must keep in a crystal flask for the following use.

This opium thus prepared, is an infallible specifick for all diseases, it is soporiferous, anodyne, and sudorifick, it lays sharp pains, it is good for rheumatisms, nephritick colicks, inflammations of the thorax and brain, deliriums, violent dysenteries, accompanied with gripes and vapours; and for all cases where the acrimony of the humour wants to be softened and tempered.

The dose is from ten, fifteen, twenty, or forty drops, which may be put in proper vehicles for the diseases, cinnamon waters, essence of vipers, or aromattick broth: the effects of this remedy are gentle and infallible, without fear of any bad accident.

This remedy is so gentle, so analogous to our natures, that it is almost impossible to perceive any alteration in the pulse of the patient who has taken it, which is quite otherwise when common laudanum is taken. It does not necessarily cause sleep, seeing that a great many patients who take it, are not forcibly made to sleep by a sudden stupefaction, as laudanum prepared in the common way does; but the patient finds by it all the good effects of refreshing ease and tranquillity that he can desire; so that if he sleep, it is rather from a call of nature, than from any over-  
ruling

ruling determination in the remedy; from which it may be concluded, of what service such a remedy may be in physick.

### C H A P. III.

*Quintessences drawn from the mineral kingdom.*

*The quintessence of mercury.*

**M**ERCURY, properly and duly prepared, contains the greatest, the most universal, and the most sovereign remedy in nature, for the cure of almost all diseases, some of which yield to no other: it is especially a specifick, as all the world agrees, for all venereal diseases, for purifying the blood, and evacuating cold humours, consequently for curing speedily and thoroughly scrophula's, of what nature soever they be, or to what degree soever of malignity they are raised, ulcerated or not: but in order that mercury may produce all these salutary effects, without producing any other bad ones, and without any danger, one must prepare and free it from its natural leprosy, soften its arsenical caustick quality, and digest its malignant crudities. In a word, sever and extract from the centre of its substance, the perfect pure part which it contains, and which absorbs and destroys all the bad qualities it has in it, at which one may infallibly arrive by the following method.

Get mercury taken from artificial cinnabar washed and purged very well with distilled



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led vinegar, and purified salt, and passed two or three times thorough shamois leather; sublime it three or four times with vitriol and purified nitre (for if the intermediate bodies be not pure, the sublimation cannot be so) after this you will sublime it seven times with decrepitated and well purified salt alone, changing and renewing the salt in each sublimation. The sublimations should be made with a well graduated fire, kept up slowly for four or five hours at least, in order that the spirits of the salt may have time to open and penetrate the mercury, before they take it up, and so by that means not take up with it its impurities; it is much better to do the sublimations in glass retorts, or a matrafs laid upon its side, with a recipient to the neck, in order to receive the spirits that will come over: these spirits are very good, and will serve you for other uses; and, besides, the mercury taking no air by the aperture of the sublimating vessel, has more spirit, and is purified more thoroughly: you should likewise observe, in each sublimation, not to take of the sublimate mercury but what is crystalline and compact, and to reject all that which is around the vessel, or sticks to it, that is not bright, or that is fuliginous, and like fine meal-dust. Having thus the mercury sublimed very pure, very white, and very bright, you will reduce it to a powder in a long-necked matrafs, and pour upon it, to the height of four or five fingers, perfect spirits of salt rectified several times, and entirely dephlegmated,

phlegmated, or even its own vinegar rectified, that is prepared and extracted from a pure amalgama of tin, very pure crude mercury, and very well sublimated mercury, extracted with one or other of these dissolvents, for a whole month together, that is to say, forty days, in a lukewarm bath-heat, keeping your vessel always very close stopped. When this time is past, you will decant into another glass vessel all the solution that is clear, and pour some fresh dissolvent, of the same nature with that which you have been using, upon what remains in the bottom of the matras, and has not been dissolved: digest it as before, until the sublimate mercury be quite dissolved by your dissolvent; and if by this second addition of the dissolvent, there still remain some mercury undissolved, you will add more of it still, and digest it, and that until there remain at the bottom of the matras only some slight feces: put all your solutions in a good matras, and add thereto a sufficient quantity of very good alcohol of wine, so that there may be almost the same weight with your other dissolvents, and see that your matras be but two-thirds full at most: seal the vessel very close up, and put it to digest in a lukewarm bath-heat, till it hath come to putrefaction; then put the distilling vessel upon ashes, and distil with a gentle heat all the spirits from it: when these have come over, you will heighten the fire after changing the recipient, and with a graduated fire you will



will make the oil of mercury to come over ; which when done, at least in part, you will leave in the bottom of the retort the feces, which you will take out to dissolve and digest, as before, in the same spirits which you will see distilled. You will do in every thing with these feces, as we have said already, until the whole substance of your sublimated mercury have risen in white oil, and the feces which remain at the bottom be altogether black, and in small quantity ; you will calcine these black feces with a very strong fire, and they will have acquired a kind of whiteness, from which you may then get a fixed salt, and purify it thoroughly by the common method, and add it to the oil which you will have rectified seven times in fresh retorts: thus will you have finished your quintessence, which you will keep in crystal flasks close stopped up, to use as occasion requires.

*The quintessence of orpiment, a specifick for the radical cure of scrophula's.*

Tho' arsenick and orpiment, such as nature furnishes us with, be the most violent and dangerous poisons, however by means of the spagirick art, managed by a skilful and expert hand, may be drawn therefrom the most perfect, and most sovereign remedies ; remedies that are gentle and friendly to our natures, and remedies that are infallible for the cure of a great number of diseases, and  
for

for all sorts of ulcers, particularly cancers and scrophula's, both internal and external. The reason of this marvellous change that is made from a mortal poison to an animating theriaca is, that arsenick, whether white, yellow, or red; for they are all of the same nature, and only differ as to more or less digestion, and a more or less exalted sulphur; arsenick, I say, contains plentifully in its centre the pure part the fire and salt of nature; and it is a poison only on account of the great number of heterogeneous particles that enter into its composition, and the extreme crudity of its parts. It is from hence that people commonly say, and often without knowing for what reason, such and such a mixt, vegetable or mineral, contains arsenical particles; that is to say, heterogeneous and very crude particles: but by my labours, conducted according to the true rules of art, I remedy these defects; I perfectly separate and reject these heterogeneous parts, and I give the pure substance the necessary digestion, in disengaging from the centre this fire of nature, which alone effects all that is salutary, and creates, so to speak, a perfect being. You will arrive at it, with the help of God, by conducting your labours upon orpiment in the following manner:

Take a pound, or what quantity you please, of orpiment; and after reducing it to a fine powder, you will mix it well with double its weight of good, pure, and well dried nitre.



Put all this mixture into a good, large, and strong crucible, covered with another crucible, with a hole a-top, thro' which the tip of the little finger may easily pass; fasten your crucibles very tight together with an iron wire, and lute with a good luting not only the junctures, but likewise the whole body of the lower crucible: when the luting is dry, you will put it in a furnace under the chimney, where you will set some lighted coals at the bottom, and fill it up to the top with black coals very dry, that they may thus burn of themselves without blowing: when the crucible shall be very hot, make a detonation of the matter with salt-petre, shun very carefully the steam, for it is very dangerous and very poisonous; for which reason I have said it should be put in a furnace under the chimney: when the detonation is over, and the salt-petre has done burning, you will leave the crucible in the open fire, and always very red, for a whole day, that the orpiment may be entirely calcined, and all its spirits evaporated. I still advise you to avoid these spirits, which are very subtile and very poisonous; but which having gone off by means of this long and strong calcination, all the danger of the operation is over. After the crucible cools, you will take out the calx of the orpiment, reduce it to powder, and wash it well several times with very clear spring, or river-water distilled, in order to take all the salt-petre out that might have

remained; and when the water shall come off quite insipid, and without any filth, you will dry by a gentle fire your calx, which you will still mix with an equal weight of flowers of sulphur, and a like quantity of nitre: put this mixture in a strong and large crucible, in order to calcine it in a large open fire, till your matter become very white, and it continue so; then wash your white calx, in order to take out all the salt-petre; after which, having dried it well at a gentle fire, and reduced it to a fine powder, you will put it up in a good strong matrafs, or an oval glass vessel, which you will cover very well round with a good luting, which you will take care to dry well: stop the mouth of your vessel very close, and put it in a reverberatory, for a month together, or more, till your calx of orpiment shall have got a very beautiful red colour, and when in that condition you will take it out of the reverberatory, even though the whole month be not elapsed.

Dissolve, in a lukewarm bath-heat, your red calx, and reduce it to a powder, with good spirit of salt rectified and thoroughly dephlegmated; when your spirit will be tinged and coloured very well, you will decant it clear into a glass retort, which you will stop up immediately; and you will put the like spirits of salt upon the calx that remained at the bottom of the vessel, for it is not likely that you will dissolve the whole at once, nor even at two or three times; you will then

3

pour



pour the spirit from the calx, when it is sufficiently tinged, and pour fresh on always in a lukewarm bath-heat, until the whole be dissolved, and it have tinged the spirit of salt: you will put all your solutions together in a glass retort, in order to distil it in ashes or sand, at first with a very gentle fire, until you have brought over all the spirit of salt; and when that is done, you will change the recipient, and heighten the fire by degrees, till it come to be very strong, in order to bring over the oil or very red tincture, which you will rectify seven times in fresh retorts. Lastly, you will put it into a circulatory vessel, in order to make different alcohols of wine to circulate therein, to the height of four or five fingers, for eight days together; having after that drawn it off by a very gentle distillation, you will digest your tincture in ashes upon an athanor, or with the fire of a lamp, for fifteen or twenty days. Thus your quintessence will be perfect, and you will keep it, till you have occasion for it, in strong glass or crystal flasks well stopped.

The dose is from one drachm to two drachms, in some broth, in the morning fasting; or even it may be applied externally upon the part affected, either altogether alone, or mixed with some fresh butter, a little warmed, with a compress laid over it.

*The quintessence of sulphur.*

Though this quintessence be not specified for the cure of scrophula's, however I thought

I should do the publick a piece of service to give it here, not only on account of its excellent efficacy against all sorts of phthysicks and hecticks, asthma's, and difficulty of breathing, and for the cure of ulcers in the lungs and thorax ; against all sorts of ulcers or wounds, and venomous bites, against a fresh contracted leprosy, pains of the gout, sciatica, and rheumatism ; but likewise, because but few of those who undertake to make this quintessence, make it as it ought to be ; whence it happens that patients are unhappily disappointed of their expectations, and true physick suffers a reproach, which is only due to such as practice it, without knowing any thing beyond the outside or skin. Herein then you will proceed as follows :

Take common sulphur reduced to a powder, and sublime it three times with vitriol purified and calcined to a red colour, changing the vitriol each sublimation ; after this you will sublime your flowers of sulphur seven times with common salt decrepitated, and thoroughly purified and blanched by several repeated calcinations, solutions in distilled rain-water, evaporations and desiccations, changing likewise, and renewing the salt at each sublimation, and that until your flowers of sulphur rise very white. The salt which you have used may serve you again, and is as good as any other, for what purpose soever : after you shall have calcined, dissolved, and purified it, you will put these flowers  
thus



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thus sublimed and become very white, into a long-necked matrafs, and lute its mouth on the furnace of a reverberatory, with a moderate heat, for a month or more, until that, by heightening the fire by degrees, yet so that the flowers may not melt, they become of a perfect red colour like a ruby. Then you will water and imbibe, by little and little, your flowers with oil of sweet almonds, very well and often rectified; the oil must float above the flowers the height of some fingers: you will put it to digest in soft ashes for fifteen days, and until the oil have drawn the tincture from the flowers of sulphur, and become very red, then you will separate it from the flowers, and put some fresh in its place, digesting it, as before, till it be tinged: you will separate it again, and put it with the first, and put some more fresh oil to the flowers, until all your flowers have thus tinged the rectified oil of sweet almonds: you then will have an excellent spirit of wine alcoholized, which you will pour upon your tinctured and coloured oil; you will put as much spirits of wine as you have oil, and digest the whole together in a glass matrafs, stopped up very close, upon lukewarm ashes, until the spirits of wine be well tinged: you will decant this, and pour some more upon the oil, in order to tinge it too; and by this means you will draw off all the tincture of the sulphur with which the oil was impregnated. After this put all your tinctures of wine into

a large and high cucurbite, in a soft balneum mariæ, in order to distil all the spirits of wine, which being altogether come over, you will leave at the bottom the pure tincture, which you will distil in ashes, in another recipient, and it will be very red, and of a very beautiful colour. After this you will rectify this tincture several times in a retort, and keep it carefully in well stopped bottles, as being of excellent use.

If you have the red flowers of sulphur by the same preparation, you may easily dissolve them in your oil or tincture; and thus by one or two rectifications alone, you will augment your oil or quintessence, as much as you please; and as much as you will have of these red flowers of sulphur, which will always have the same virtue, and have a very agreeable smell. Experience will make you prize this tincture more than all I can say of it.

*The quintessence of common salt.*

If you can get common salt made from sea-water, by a simple evaporation without boiling it, or that which they call flowers of salt, that is made in the salt-houses at Pecay near Aiguemortes in Languedoc; it is the best for making the quintessence: but if you cannot get it, take common salt from a salt-granary, and at first cause the one or the other of these salts to decrepitate, and after that dissolve it in a sufficient quantity of rain-water,



water, gathered at the equinoxes, distilled seven times after putrefaction; filter the solution, evaporate, or distil gently, to dryness; dissolve it with some of the same water; filter and distil it again, till it be quite dry, which you will repeat several times with fresh water, and until your salt be thoroughly pure, white, clear, and transparent, without acrimony, and almost sweet; yet it will not arrive at this degree of requisite perfection, until your solution shall be clear and clean before it is filtered, that nothing shall make it look muddy, and that you shall not see any mote swim in it; if the time, the season of the year, and your apartment will permit, you must expose for some hours, in the sun, your salt to dry, after you have drawn off the water that has dissolved it, either by distillation, or evaporation. Having thus your salt perfectly pure and dry, you will put it into one or more strong glass or stone retorts, well luted with a good luting, that can stand a very long, strong, and violent fire: see that the retort be no more than half full, fit to it a very large recipient, or large glass matrafs, lute the junctures very close, and when the luting shall be well dried, you will give it the fire by degrees, and raise it very strongly at the last. This distillation is from sixty to seventy-two hours; you must not entirely let out the fire, nor let that degree of it be remitted, it should rather be encreased than slackened. After that the

distillation shall be finished, that is to say, after that no more will come over, neither spirit nor steam, you will keep up, for six or seven hours at least, the fire very violently; you will mind, while the first spirits come over, to moderate your fire, for fear lest the spirits, which are very violent and tumultuous, should break all, if urged too strongly; the other spirits which come over after the white steams, are not so impetuous, and you may heighten the fire boldly without danger; you must likewise, during the whole time of the distillation, keep linen clothes moistened in fresh water upon the matrafs or recipient, that the coolness may make the spirits that circulate in the recipient, in the form of vapours, condense the sooner: at last you will let the fire go out of itself, and not unlute the neck of the recipients to separate them, till all be very cold; and even after you have separated them, you will immediately stop them up with linen stopples moistened in a clean water, and the stopples fitted clean too, and you will let them lie, with what is in them, in a cool place, at least for twenty-four hours, or even two or three days, that all the spirits may have time to settle, penetrate the pores of the water, and become themselves spirituous waters: after this distil them in ashes upon the caput mortuum, in order to dephlegmate, and rectify them in a cucurbite seven times at least; put them entirely dephlegmated and rectified into a glass bottle  
well



well stopped, till you have purified the fixed salt, which you will take from the caput mortuum, according to the usual method in other fixed salts; you will purify this salt very carefully, by repeated solutions with its water or pure phlegm, by calcinations, filtrations, distillations, and desiccations, till you have made it very white and very pure, without any feces in the solution, melting like wax at a gentle heat, and sweet like sugar, and till at length you have brought it, by a slow coction, to a red and shining colour; not till you have brought it to the last degree of perfection, will you put it to its pure spirit, which we have above told you to reserve: you will add an equal weight of each together, and you will put thereto of an excellent alcohol of wine, in equal weight, to both together, I mean the spirit and the fixed red salt: you will put the whole in a glass retort stopped up very close, which you will set in a lukewarm bath-heat for a philosophic month, in order to digest, and till the spirit be tinged with the red colour, and till one see by that, that it has drawn the very soul and tincture of its substance, which consequently it will have truly dissolved, and that with a radical physical solution. Lastly, after this digestion and solution, you will filter and distil it to dryness, cohobate what shall be distilled, upon that which remained in the bottom of the vessel, and which could not rise in the first  
distil-

distillation ; distil and cohobate it over again, till all rise volatile and come over into the recipient : you must, last of all, in order to make your quintessence perfect, rectify it four or five times in fresh and very neat retorts, and separate all the spirits of wine from it, so that there may be no sort of mixture of heterogeneous particles, and that it may be perfectly pure : put up in crystal flasks well stopped, this precious quintessence, and keep it for use. Its virtues are innumerable ; it serves internally and externally.

Its dose is from one drachm to two drachms in some broth or old wine, with a little sugar, or in cinnamon-water, anniseed-water, imperial-water, theriacal water, or other vehicles proper for the disease, at all hours and at all seasons, according as it is wanted : but if it be to recover strength, or to ward off old age, and to maintain youth in its force and vigour, it must be taken every morning fasting, till one find he has had enough of it.

*The quintessence of lead.*

Take a beautiful minium or litharge, which you will dissolve in very strong wine-vinegar, distilled and well dephlegmated ; filter the solution, and let it gently evaporate in a copper vessel, till it be of the consistence of honey ; dissolve this marck in fresh vinegar distilled ; when it shall be well dissolved, you will digest it in a lukewarm bath-heat for the space of a month ; after this filtrate and evaporate



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porate it till it come to the consistence of honey; repeat these solutions in fresh vinegar distilled; digest it in a lukewarm bath-heat for fifteen days, for the two following, and for ten days for the three last filtrations and evaporations, till it be of the consistence of honey, after you shall have made seven of these operations with distilled vinegar; and at the last draw off all the vinegar, yet without too much drying the matter: you will dissolve this magma in excellent alcohol of wine, and digest it for fifteen days in *balneo mariæ*, the vessel being close stopped up and sealed, that the spirits of wine may not escape, and that the more subtile parts may not evaporate. After this digestion is over, you will distil in a retort, with a very gentle heat, all the spirits of wine; which having come entirely over, you will change the recipient, and augmenting the fire by degrees and carefully, you will draw off first the spirits of the lead, which should be white and sweet; and after that, in a fresh recipient, you will bring over the oil, which will be of a yellow colour at first, and afterwards very red: you will rectify this oil four or five times in fresh glass retorts; then take all the feces that remained at the bottom of the retort, and which should be black and tarnished, and calcine them in a strong fire, and for some time, until they become very white; you will thus reduce them to powder, and put them in a sufficient quantity of distilled water;

ter; there must be at least eight or ten parts of water, for one part of the powdered white feces; you will keep the vessel where all this shall be, in a boiling bath-heat, between seven and eight hours; and if your water waste too much by evaporation, I mean, if it evaporate more than half, you will substitute some fresh in its place, that all the fixed salt which is in these feces may be dissolved, and go into the water. After this you will let this water settle out of the bath-heat, that it may clarify, and the sediment fall to the bottom of the vessel, and form an hypostasis: decant this clear water, or strain it through a filtre of brown paper, and let it evaporate very gently till it become dry; calcine this salt, which the water has left, dissolve, filtre, and evaporate it to dryness; repeat several times these operations, till by this means alone your salt become very white, very pure, till it be sweet and easily melted, like wax or butter. When your salt shall come to this degree of perfection, you will put it to its white spirit, which came over before by distillation, before the red oil, and which you will have taken care to rectify at least five times. Having thus put them together, you will keep them in a lukewarm bath-heat, the vessel being close stopped up for fifteen days; after this you will distil the spirit, and cohobate it upon the fixed salt, which will remain in the bottom so long, till the salt will rise volatile to the capital; make this salt rise, and sublime seven



ven times, till it be perfectly pure : after this you will add it, with its spirit, to the red oil, seven times rectified : you will let the whole digest together for a month in a lukewarm bath-heat, and after that ten days upon an athanor in soft ashes. Thus these three principles being divided, purified, digested, and joined together, only constitute one and the same homogeneous substance, the virtue of which cannot be expressed, for the cure of sores, ulcers, and burns, for laying the internal heat of a fever, and especially of slow fevers, for the cure of the green-sickness, and every uterine disorder.

The dose is a scruple in some broth or waters competent to the disease, in the morning fasting ; the patient must keep his room, and observe a regimen, because sometimes the remedy operates very strongly up and down, sometimes by urine, at other times by sweat, according to the necessities of nature : but these purgings, how violent soever they be, are nowise dangerous nor fatiguing, because they are natural. There may likewise be made a balsam of lead for external applications.

*The quintessence of marcasites of gold, a specific for scrophula's.*

You will have marcasites of gold reduced to powder, which you will mix with an equal weight of common salt decrepitated and well purified by several operations : put this mix-

ture into a good strong retort, luted all over with a good luting; let it be filled only a half, or a third part; fit to it a large glass recipient, and lute the junctures very strongly and accurately: give it the fire by degrees, and continue it until all the sulphurous spirits, both of the salt and the marcasite, have come over into the recipient, and have turned to a water, which will be exceeding acid, and which you will rectify seven times, dephlegmating perfectly the spirits, which you will put in a glass bottle stopped up very tight, to serve you for use hereafter. As to the magma which will remain at the bottom of the retort after extracting the spirits, you will reduce it to a powder, in order to edulcorate it, and to take all the salt from it that has remained therein, by several repeated washings with spring, river, or distilled rain-water, till the water come over mild and insipid, without any taste of salt: then after having dried your powder of the marcasite, you will put it, and mix it nicely with its equal weight of beautiful, very bright, and very dry nitre, and you will detonate it in a strong earthen vessel, in a great fire of coals: after this you will separate the marcasite from the salt of nitre by several washings, as you have done before with the common salt. Put this powder, very well edulcorated and dried, into a long-necked matrafs, whose mouth is exactly luted, to a moderate reverberating fire for a month, and until it has got a very beautiful  
red



red colour; then taking it off the fire, you will pour upon it its own spirit rectified seven times, and you will digest it in a lukewarm bath-heat, till the spirit be well coloured, which you will then decant, and pour more spirit upon the marcasite, which must float about four fingers above it: these being coloured like the first, you will pour them off, and put some fresh to it, until all the tincture be extracted and added to the spirit. After putting all your tinged spirits into a glass retort, which you will stop up tight, you will put them to digest in balneo, for fifteen days, after which you will distil them in a retort four or five, or seven times if needful, in order to make all the oil or tincture come over with the spirits, whose intimate union will be easily brought about, if at each distillation you take care to separate the little phlegm that may still remain therein.

The dose of this tincture or quintessence, is from eight to ten drops in some broth, or proper vehicles. It is likewise applied externally, always with salutary effects, by mixing some drops of it with the ointments or oils that are competent and proper for the cure of the disease. It is a specifick against scrophula's, not only those that are ulcerated, but likewise those that are not. It should be applied externally, in order to resolve them in a little time, and to root out, extinguish, and destroy whatever is cancerous: nothing is a more sovereign remedy for the speedy cure of all cutaneous diseases.

*The quintessence of red coral, a sovereign specifick for the curing and consolidating all sores and ulcers, and for entirely purifying the whole mass of the blood; as likewise for comforting the heart and stomach.*

Get some red coral, which you will reduce to a very fine powder, to an alcohol upon the marble; after which you will dissolve it in very sharp vinegar, drawn from the butter of antimony rectified three or four times, and made of equal parts of crude Hungarian antimony, and of mercury sublimated seven times with purified salt; make your solution by digesting it in a lukewarm bath-heat; and if what you have put at first of the dissolvent, be not sufficient to dissolve all the powder of the coral, you will put some fresh to it; after which you will decant that which is digested, and which is impregnated with all it could dissolve. The whole being dissolved, you will filtrate the solutions; and cause all the liquor to evaporate in a dish; or in a silver, gold, or strong crystal bason, till it be dry; afterwards dissolve this salt of coral that remains at the bottom of the evaporating vessel, in distilled rain-water; filtre and dry your salt till you have purged it of all earthy impurities, till it melt like wax, be as sweet as sugar, and clear like crystal. After that you have brought your salt of coral to this degree of perfection, by the method prescribed, you will take some more red coral, as much



much as you have taken at first, in order to reduce it to a white and pure salt; and after you shall have reduced it to an impalpable powder, you will mix it with an equal weight of very neat pure sal armoniac, you will sublime it in a proper matrafs or glass retort, until the sal armoniac rise very red, impregnated with the tincture of coral, which should be white at the bottom. You will afterwards separate this tincture of sal armoniac with spirits of wine, very pure and very much alcoholized, which in their turn taking up all the red tincture, will leave the sal armoniack very white at the bottom: then you will draw off the spirits of wine, and separate them by a very gentle distillation in balneo mariæ; and you will add the tincture which will remain at the bottom of the vessel, to your pure and mild salt, which you have prepared before. Last of all, you will digest the whole with a gentle ash-heat, which is equal and continual, upon the athanor or lamp, for a month, and all will be perfectly finished. Thus you will have a salt of coral of the most beautiful red colour in the world, whose virtues will be admirable.

The dose is from half a drachm to a whole drachm, in good broth, a fresh egg, theriacal or imperial waters, malmsey, wine with some sugar in it, or other vehicle proper for the disease, or the palate of the patient. It may be taken at all hours, but not just after eating, and when the stomach is already overloaded.

loaded. If any has a mind to use it externally and topically, for the cure of wounds, sores, and internal or external ulcers, it must be mixed with some balsamick oils, and applied a little warm upon the part affected, with a compress and bandage.

*The quintessence of pearl.*

After you have reduced your pearl to an alcohol, by a strong and long trituration upon the marble, you will entirely dissolve it in balneo, with vinegar, or a very sharp acid, drawn from antimony or sublimated mercury, the same with that used in the quintessence of coral: when the solution is over, you will filter the liquor through paper, and having put it into a matrafs close stopped, you will digest it for a whole month together in a lukewarm heat, that the solution of the substance of the pearls may be made in all its purity and perfection. After this digestion you will distil in balneo all that can rise, or at least till it be of the consistence of melted honey, and you will let it stand and dry in a dish or silver pan; and this you will repeat two or three times with very sharp vinegar; after this you will thoroughly purify this salt of the pearl that remained at the bottom, and was dried with a soft heat, with distilled rain-water, until your salt be very white, very mild, and melt as readily as wax: then you will pour upon it some good alcohol of wine, from four to five fingers height, in a  
glass



glass vessel that is close stopped up, in order to circulate therein between eight and ten days ; afterwards distil this precious liquor, which you will cohobate a number of times, in order to sublimate the salt of the pearl, which should rise whiter than snow, and sweeter than sugar. You may keep it alone, and without any mixture ; and if you have a mind to mix it, in order to give it more virtue and efficacy, do it with an oil or essence of philosophick gold, in crystal flasks stopped up very tight, for the marvellous uses, which all authors make mention of ; wherefore I forbear here entering into any detail upon it.

The dose is from half a drachm to a whole drachm, in the morning fasting, or at any hour of the day or night, if need require, in some broth, a fresh egg, good old wine with some sugar in it, aqua vitæ with sugar, distilled waters, cinnamon-water, anniseed-water, imperial and theriacal waters, or any other competent vehicle proper for the disease, and the state of the patient.

It is to be observed, 1. That the true and physical purification of salts, cannot be performed but by putrefaction ; and that consequently purifications brought about by repeated solutions, filtrations, and calcinations, or desiccations, is properly no other than a preparatory, yet necessary, purification. 2. That the putrefaction and union of the salts, cannot be performed but by the addition of spirits of

wine alcoholized with the pure spirits of the said salts.

I have here given the true method for extracting the perfect quintessence of all the mixts in nature ; I have given it you very circumstantially, and in the clearest manner I was able ; and I have therein treated some of each kingdom, which may seem to you superfluous, and useless for the design of this treatise, which is the cure of scrophula's : but besides that they all tend to the purifying of the blood, and the curing of ulcers, they are necessary to serve as an example and rule, by which to extract all the other quintessences which you would have, of what kingdom or species soever ; since in each kingdom there are different species, some more sulphurous, others more saline, and others more mercurial ; these full of juice, those almost entirely volatile, others fixed ; for in the examples which I have given, you will find the method of treating the one and the other ; but let not the trouble, pains, and expence, frighten you : And can it cost too much to have something good and excellent, from what is excellent in itself ? which tends, or rather is necessary to the conservation of life and health, or for the cure of cruel diseases, which deprive us of the one, or which alter and disorder the other.

It is only by long and painful labour, conducted by a true knowledge of nature, that this great good can be procured, because all

I mixts,



mixts, whether vegetable, mineral, or animal, are full of impurities or heterogeneous parts in their inmost contexture, and that these impurities cause all our diseases, which bring on death, or which weaken and enervate entirely the virtue of the good, that is to say, the pure and homogeneous part which is contained in the mixt: and for the same reason, there is not a mixt in nature, from which you may not draw an excellent remedy; there is no wine, no poison, which you may not soften and reduce to a salutary quintessence, because there is not any one thing which does not contain in itself, and in its centre, some pure parts homogeneous to our natures, otherwise it would not have subsisted; a mixt without any pure part, is only an ens rationis: the difficulty therefore only lies in knowing how to extract and entirely separate it. All was pure at the beginning, no contrariety, no jarring in the works of the Creator, no opposite mixture, no contrary quality in that which came out of his hands; all the fruits which the earth produced, were wholesome, invigorating, delicious, and agreeable, even to the eye, as the Scriptures express it, because the earth, which was their matrix, was pure; and the elements, which formed them, were not confounded, were distributed to each species in the portion competent to each: whence they could not but be salutary to animals and to man, who fed upon them.

But as God had created all these things for man, this very man, the object of the divine complacency, the lord of all nature, having degraded himself by his fall, having revolted from, and disobeyed his Creator, was for his crime punished by the malediction which God laid upon the earth that should support and maintain him, by the confusion and disproportionate mixture of the elements and original principles: from hence proceed the irregularity in the seasons, the impressions of pain and uneasiness, which cold and hot, dry and moist, cause in us; from thence arise their malignant influences upon our bodies; from thence the alteration of the fruits, their corruption and malignity; hence a true and mortal poison in several mixts; impurities, mixtures, and intimate poisons, which enter into their natural composition, and which consequently are extremely difficult to be separated; at which one cannot arrive, if the mixt be not entirely analyzed, in order to be able to separate its pure and primordial part, so to speak, which is kept so strongly bound and imprisoned, as it were, in the centre of its integrant or component parts.

For we may truly say, that by our art, and by that alone, when well understood and well executed, one may arrive at this requisite depuration: but as it is an effect of the divine mercy, and of his love for mankind, one shall never succeed therein but by prayer, a purity of heart, and a rectitude of intention, which



## VENEREAL MALADIES. 423

which draw down upon us, from our heavenly father, such lights as are necessary for our knowing what we ought to do, and afterwards doing it properly and duly. Let us not then be any longer surprized, if so many people attempt it, and so few succeed therein; if the most learned, according to the opinion of the world, and the greatest genius's, are those who commonly doubt, are ignorant, and cannot succeed, because they have not said with Solomon, \* *O Lord, give me that wisdom which sitteth by thy throne — that it may be with me, and may labour with me too.*

\* Wisd. ix. 4, and 10.

THE UNIVERSITY OF CHICAGO  
DIVISION OF THE PHYSICAL SCIENCES  
DEPARTMENT OF CHEMISTRY  
CHICAGO, ILLINOIS 60637

# DISSERTATION

Submitted by  
[Name]

in partial fulfillment of the requirements  
for the degree of  
[Degree]

by  
[Name]

## CHAPTER I

INTRODUCTION  
The study of the properties of the  
[Subject] has been the subject of  
[Research] for many years. The  
[Subject] has been found to be  
[Properties] and the [Subject] has  
been found to be [Properties].

The [Subject] has been found to be  
[Properties] and the [Subject] has  
been found to be [Properties].



A  
DISSERTATION

O N

*Hermaphrodites.*

B Y

GEORGE ARNAUD,

Ancient Master of Arts and Surgery, Member  
of the ACADEMY, and Demonstrator of the  
School of *St. Come* at *Paris*, Herniary Surgeon  
to all the Hospitals of the same Town, and  
Military Hospitals of *France*; now Surgeon of  
*London*.

—neque indecorum nobis in utilitatem audientium  
nominare dicata conceptui organa, quæ & ipsum Deum  
creare non puduit.

*Clem. Alexand. Pædag. 11.*

DISSEMINATION



---

## Advertisement.

**A**S early as the year 1733, I read the following dissertation on *Hermaphrodites*, at a publick meeting of the Academy of Surgery. Though it seemed equally to take with the people of the art, and the learned of all denominations who honoured the assembly with their presence, I thought proper however to defer the publication : at that time being too young, and but just beginning to enter upon the practice of hernia's, which requiring a great deal of circumspection, and a delicacy of manners, a work of this sort could not fail of exposing my character to the censure and malice of my enemies.

It

It was necessary therefore to suppress it ; it now has lain by me for eighteen years, and would have lain still longer, had it not been for some circumstances which prevail with me to publish it.

There appeared in *London*, ten years ago, a girl of bad structure as to the parts of generation, who passed for an Hermaphrodite ; she in that respect imposed upon the curious. Dr. *Parsons* published in *English* a book intituled, *A mechanical and critical inquiry into the nature of Hermaphrodites*. This work undeceived the world as to the false notion it had entertained in regard to this creature. Another sort of person of the male kind, and lately arrived here, gives room to disputes about his state ; some affirming, others denying, it to be hermaphrodital. People go still farther, and ask themselves, Whether really there be genuine  
Herma-



Hermaphrodites or no? Some pretend there may be, others would prove there are none. Those build on the opinions of authors, who have proved their existence; these employ the arguments, which other authors have opposed to the former. From all these reasonings there appear to result but vague and confused ideas, which still leave the problem unresolved.

My design is not to decide this controversy, my only view is to expose the facts on each side, which have given room to the disputes that have subsisted for upwards of two thousand years, upon this subject. I have confined myself, as much as possible, within the strictest limits; I thought that it was better to instruct by amusing, than to tire out by instructing. In giving a summary relation of the opinions of authors, I afford satisfaction enough to the learned; the curious will ask  
for

for no more. To support the opinion of the ancients, I shall relate the most authentick observations of our days, made by modern practitioners who are still living: I have added the history of an anomolous person, whom I have myself observed. And here I shall obviate an objection, which the criticks will be sure to start upon this observation; they will say, it is too long; a fault which some persons have upbraided me with, in regard to my dissertation on hernia's. To this I answer, that observations can never be too circumstantial; and that it is a defect, common both to the ancients and moderns, to be too little circumstantial in relating of facts: and this accounts for our deriving so little benefit from the numerous volumes of observations left us by the ancients. Why then do not the moderns, who expect to be read, correct the faults they find



find in those who have gone before them ?

To avoid the reproaches that might be made me in regard to the passages which I have been obliged to quote from the Latin poets, I have softened, in the translation, the freedom of the original, without altering any thing in the genuine sense of the authors.

As to the plates, which might convey along with them, to the minds of some, a character of obscenity, they are taken from the authors ; and if there is any difference, it is only in the delicacy of the execution ; a mark of the generosity of the bookseller, who has been at that expence.

As my design is to enlarge this subject with the greatest number of observations I can possibly collect, I take this occasion to invite persons

sons of the art acquainted with similar cases, to communicate them, in order to their being put together into a new edition of this work, which their generosity would encourage. The authors will be no losers, the publick great gainers; especially if the observations are accompanied with cuts.

Those who are possessed of particular facts in relation to hernia's, are also entreated to communicate them, to be put in their proper places in the new edition of *The compleat treatise of Hernia's*, which I propose to publish in quarto next year.

LONDON, Martlet-Court,  
Bow-Street, Covent-  
Garden, May 1750.



A  
 DISSERTATION  
 ON  
 HERMAPHRODITES.

**W**HATEVER degree of accuracy The In-  
 and wisdom nature employs in roduc-  
 the composition and frame of the  
 human body, we have oftener than once  
 seen her swerve from these, and, as it  
 were, forget herself; oftener than once,  
 instead of regarding that construction, that  
 order, those proportions of the organs,  
 whence results that perfect harmony, which  
 forms the object of our admiration, she  
 has exhibited irregular, vicious, and un-  
 seemly conformations of parts. It should  
 seem, to speak the language of a certain  
 author, that this common parent, tired  
 out and spent with producing every day  
 the same things, over and over, in the  
 same order, did now and then quit that

uniformity, and throw into her productions a variety but little conformable to her laws. Sometimes she with-holds from a body the parts the most necessary ; in another subject, she is pleased to multiply them, often allots them situations, connections, and dimensions, the most extraordinary and fantastical ; she separates what, according to her own laws, should be joined, and joins what ought to remain separate : hence arise those deformities in the strokes or features, those members ill-articulated, those disproportions, those imperfections of organical parts, and those combinations, so monstrous and out of the common road, that it is with difficulty we discover nature even in nature herself. Among the *lusus naturæ*, which are exhibited to us under different forms, some are of a peculiar species, which cannot fail of exciting our curiosity or compassion, and which art can never pretend to correct. There are others, on the contrary, which call for all the attention of the surgeon, and in which his understanding and dexterity become of extraordinary use ; who leaving to the bare speculative physician, the painful but honourable province of finding out the mysterious causes, his principal concern is to



lend a helping-hand to those who are thus disfigured by nature; he omits nothing in his power to redress and set her to-rights again, by prudent and skilful operations; and sometimes he is happy enough to succeed, either by retrenching uselefs and superfluous parts, or by joining those which are separated, or separating those which are joined against the order of nature, or by laying those open and bare, which are concealed and covered. Daily practice furnishes examples enough, to prove that I advance nothing at random: but that I may confine myself within the limits prescribed, I shall rest satisfied with giving proof thereof, by reciting an observation concerning an hermaphrodite, after having given a general idea of the different sorts of people of faulty structure of the parts of generation, who have been considered by certain authors as hermaphrodites, of which others formally deny the existence.

By the term *hermaphrodite*, we understand him or her, in whom the parts, which form the essential difference between the two sexes, are found together, either perfectly or imperfectly. It is de-

Etymology of the term hermaphrodite.

Hermaphrodite;  
its origin.

rived from the greek, Ἑρμαφρόδιτος, signifying to be made up, or consist of Mercury and Venus. In Ovid we find the fabulous history which has given rise to that signification; he makes Hermaphroditus to be the son of Mercury and Venus; who, says he, was of so perfect a beauty, that the nymph Salmacis fell desperately in love with him one day, as he happened to be washing in a fountain where she presided; enraged for being unable to make him sensible of her passion, she prayed the gods to join them together in such a manner, that their two bodies should make but one, in which, however, the two sexes should remain accurately distinguished; this favour was granted:

*Nec duo junt, sed forma duplex, nec fœmina dici*

*Nec puer ut possint: neutrumque & utrumque videntur.*

“ They are not two, yet the form is  
“ twofold; we cannot say, that it is the  
“ body of a boy or of a girl; they are nei-  
“ ther, though they appear to be both.”

The ancient poets, fruitful in fictions,  
underneath that veil concealed truths,  
I which



which happy geniuses have skilfully unveiled, by interpretations either moral or political. But the sequel of this discourse will possibly serve to justify those who imagine, that the veil which covers the truth in this fable, may be seen through. For may we not from this fiction infer (as M. Mertru<sup>a</sup>, who in this agrees with the Abbe de Bellegarde<sup>b</sup>, says) that “the ancients had a knowledge of the union of the two sexes in one and the same person; and that this fantasticalness of nature, is the origin of the fiction related by Ovid in his metamorphoses.

“Ovid has feigned,” says the Abbe de Bellegarde, “that Hermaphroditus was the son of Mercury and Venus, upon the observations of some naturalists, who have remarked, that the children, who are born during the conjunction of these two planets, are sometimes hermaphrodites, and partake of both sexes.”

The Greeks have, moreover, called these sort of creatures *androgynes*, a term which

F f 3

seems

<sup>a</sup> Mercure de Franc. du Mois de Fevr. 1750. Edit. Lond.

<sup>b</sup> Auteur des Explic. sur les Metamorph. d'Ovide. Edit. de la Haye, 1735.

seems to be more significant, in that it is derived from the two words *ἄνθρωπος*, which denotes a man, and *γυνή*, a woman. We however will use that of hermaphrodite, as being more common or popular.

Some  
affirm that  
Adam was  
an herma-  
phrodite.

I will not engage in the disputes of some rabbins, who have given out that Adam was an hermaphrodite, prior to his fall, and that he was created with a view to continue in that state. On this head may be read Gaspar Bauhin.

Aristotle's  
opinion  
on herma-  
phrodites.

Hermaphrodites have been allowed of by so great a number of authors, that some people have no manner of doubt of their existence. Aristotle would seem to prove their evidence by the recital he makes of them: he relates such peculiarities of them, as are admired by some, and laughed at by others. I here pretend not to fix the judgment of the reader, every one is at liberty to settle his ideas according to the extent of his understanding; my aim only is to relate the authorities of those who merit our attention: I shall neither contest nor prove that Aristotle has talked idly, or with reason affirmed, that some hermaphrodites had the right breast like that of



a man, and the left like that of a woman, and that they changed nature alternately ; that may or may not be, 'tis what I will not determine ; nature shews every day singularities too surprising to attempt engaging in that dispute with Aristotle.

Ambrose Pareus, who had studied nature like a true surgeon, gives much more clear and precise ideas of them than Aristotle, by the division he has made, which at once gives us a true notion : he has given us several figures, among which is that of two hermaphrodites, twins, which came into the world joined by the back ; fig. 1. plate II.

Ambrose  
Pareus's  
opinion  
on herma-  
phrodites.

The best authors who have treated this matter since Pareus, have followed his division ; as Gaspar Bauhin, who has writ a particular treatise, which is very ample, and so learned, that there are few works in any kind of natural history, so full of erudition. Duval, physician at Rouen, follows also Pareus's division. The author of the *Tableau de l'amour considéré dans l'état du mariage*, has also allotted for them a peculiar chapter, considerable and ample enough, following also Pareus's plan, ba-

ting a few things : he however engages in explanations which are very abstracted and vague. Martinus Schurigius, in his *Spermatologia historico-medica*, gives very singular instances of them, and follows also the division of Pareus.

These authors, and others who have gone before them, as Hippocrates, Galen, Realdus Columbus, Paulus Ægineta, Fortunius Licetus, and others, have undertaken to explain what they imagined might have given occasion to the generation of hermaphrodites (those they took for such) but what they have left us on this head, contains nothing interesting enough to claim our attention : and as all I could myself advance, could not give half the satisfaction that the demonstration of facts affords, as nature lays them before our eyes, I pass on therefore to the division of the different species of hermaphrodites.

Division  
of herma-  
phrodites.

They are divided into four species, namely, the male hermaphrodite, plate I. fig. 2 ; the female hermaphrodite, plate I. fig. 1 ; the perfect hermaphrodite, plate II. fig. 1, 2, 3 ; the imperfect hermaphrodite, plate III.

The



Besides these four species of hermaphrodites, there is a particular sort of persons of bad formation of the parts of generation, to which we cannot ascribe any character of hermaphrodite ; of which plate IV. may serve to give a general idea : I shall give instances thereof.

The male hermaphrodite is he in whom <sup>Male</sup> the parts of generation of the man are perfect, both in dimensions, figure, and actions ; and in whom the parts of the woman err through some peculiarities, as when the vagina is not open enough to admit the penis ; and that there is only an imperceptible outlet for the discharge of the menstrual blood. <sup>herma-  
phrodite.</sup>

The female hermaphrodite is she who <sup>Female</sup> has all the parts of the woman fit for generation, and in whom the appearances of virility are imperfect. This species is characterised by those women in whom the clitoris is disengaged or free (for in the natural state, tho' it is, indeed, considerably swelled in the venereal act, yet it never quits its place to become erected ; see plate IV. fig. 1.) and which having the same <sup>herma-  
phrodite.</sup> figure

Ribaude,  
what,

figure with the penis of the man, yet without being perforated like it, makes them almost resemble eunuchs, who can enjoy coition without the perfect consummation of the venereal act. The Greeks called these women *τριβυδῆς*, whence comes, I imagine, the old French word *ribaude*, which signifies a lewd woman; such was the famous Sappho. Martial writ the following epigram on occasion of a certain young woman of this species, who passed for virtuous for some time, because she had never ventured her chastity with the men:

*Esse videbaris, fateor, Lucretia nobis,  
At tu, pro facinus! Bassa fututor eras.  
Inter se geminos audes committere cunnos,  
Mentiturq; virum prodigiosa Venus.  
Commenta es dignum Thebano ænigmate  
monstrum,  
Hic, ubi vir non est, ut sit adulterium.*

“ I own, Bassa, I had all along taken  
“ you for a virtuous person; but, O infam-  
“ mous! you played the whore-master,  
“ and had the impudence to act the part  
“ of a man with your own sex, and make  
“ yourself pass for one; a prodigy worthy  
“ the Theban riddle, that adultery may  
“ be



“ be committed without the intervention  
 “ of a man !”

Some years ago a girl of this sort was confined at Paris, because she went about in men's cloaths, and was discharged out of prison, on condition of going dressed like a woman, which she did with much regret. These sort of women are pretty rare in Europe, but were formerly very common in Egypt; and when they were to be married, care was taken to cut the clitoris, to prevent its being troublesome to the husband. Aetius and Paulus Ægineta give the method of performing this operation.

The perfect hermaphrodite, according to the relation of certain authors, is where we find the parts of generation of both sexes, with both the active and passive power. Albertus says that there are hermaphrodites who are both *incubi* and *succubi* in coition, and yet incapable of generating or conceiving: wherefore nice and scrupulous authors consider these as imperfect hermaphrodites.

They

The true  
character  
of the per-  
fect her-  
maphro-  
dite.

They would have the parts of both sexes, each in particular, to have the genuine character which constitutes their essence: for if there are some which are faulty, through a vice of action or proportion, they accordingly class the subject with the male or female hermaphrodites.

The most  
natural  
order.

The disposition of the exterior parts seems to be of no importance to their faculties, and changes nothing in the species. It has been observed, that in some the parts are placed contiguous to each other; see plate II. fig. 1 and 3. Others there are, in which they are placed one above the other; sometimes those of the man have the first place; sometimes, those of the woman predominate; see plate II. fig. 2. But the most perfect disposition, in my opinion, is that which makes no alteration in the natural situation of the parts; as when the penis occupies the place of the clitoris, and the two testicles are inclosed in the lips of the vulva, as they would be in the scrotum, if divided into two equal parts, as may be remarked in plate I. fig. 2.

The



The opinions have at all times been divided in regard to the existence of this species of hermaphrodites. Hippocrates, Galen, Licubantius, Paulus Zacchias, Fabricius ab Aquapendente, and some other authors, knew of no such species; and from thence it is they disavowed them, in like manner as some philosophers did: yet Aristotle, several historians, and some physical authors, relate instances of them, which seem guarded with all the characters of truth; and there is, even in the Talmud, a law for them, comprising several articles, and from which lawyers have taken their authorities to restrain these people. See Gaspar Bauhin.

The opinions divided as to the existence of genuine hermaphrodites.

Every body knows the horror with which superstition had inspired the Romans against these sort of persons, who, by the laws of the Aruspices, were condemned to be drowned some years after their birth, because they were considered as monsters by the decree of Romulus; but in the time of Pliny they laid aside that unjust prejudice, as he proves by these words: *Gignuntur utriusq; sexus quos hermaphroditas vocamus, olim androgynos vocatos, &*  
*in*

If authority, tending to prove the existence of perfect hermaphrodites.

*in prodigiis habitos, nunc vero in deliciis.*

“ There are persons born with both sexes,  
 “ whom we call hermaphrodites, formerly  
 “ called *androgyni*, and deemed prodigies,  
 “ but now had in great favour.

These same Romans, convinced at length of their error, made a law, by which those who united in themselves both sexes, had the liberty of chusing their sex ; but if after having made this choice, they came to be convicted of having made use of the other sex, they were punished with great rigour and severity.

Had authority, which seems to prove the existence of perfect hermaphrodites.

Another authority, which some people urge, to prove that the Romans allowed of true hermaphrodites is, that there was at Rome the famous hermaphrodite, which Polycles, a sculptor of great reputation, had made. There have been others found in marble, which are kept and considered as perfect master-pieces, and of inestimable value ; whence they would infer, that these rare pieces were made after the life. But the figures of centaurs, satyrs, fauns, tritons, syrens, &c. which antiquity supplies us with, greatly weaken that proof.

We



We read in history of the cruelties which were formerly exercised in some parts of the India's upon hermaphrodites, who, from being very numerous, were employed in works, to which in Europe we put our horses.

M. de Rennefort says, that at Surat there are still many people of that species, who with the dress of a woman are obliged to wear the turban, to publish to the world that they have the advantages of both sexes.

Pliny, after Calliphanes, affirms, that among the Nafamonians and Machlyans, people of Africa, there was a great number of hermaphrodites, who had mutually carnal knowledge of each other.

Gaspar Bauhin, Johannes Schenkius, Realdus Columbus, Martinus Schurigius, and some other physical authors, confirm their existence by the enumeration they make of them.

In fine, Tertullian, St. Augustin, Kugler, and other divines of our day, have treated these

III<sup>d</sup> authority, tending to prove the existence of perfect hermaphrodites.

IV<sup>th</sup> authority, tending to prove the existence of perfect hermaphrodites.

Divines admit the existence of hermaphrodites.

these matters, so far as they have a relation to good order, and the regularity of manners.

It is of  
importance to  
physicians  
and surgeons  
to be instructed  
in what constitutes  
the character  
of hermaphrodites.

But whatever be in this, as it is possibly on the relation of physicians and surgeons, that divines and lawyers determine on the species of the sex to which those should keep, to whom nature has given faculties so opposite, either for administering to them the sacraments, or doing them justice in civil and criminal affairs: 'tis in these cases that surgeons ought to be perfectly informed in the structure and relation of these parts which constitute hermaphrodites; and that they ought to give a good deal of attention to the nature of the secretions peculiar to these organs, without which they would be guilty of very great mistakes, by forbidding those parts, which possibly might be the fittest for generation, in order to allow the action or use of others, which might have the least degree of force, and the least faculty for that purpose.

With authority,  
tending to confirm  
the preceding  
ones, in

This examen, and the judgment we should pass upon it, are of so much the greater consequence, as the civil and canon laws are very strict against those who fail  
in



in the oath they have been forced to take, <sup>regard to</sup>  
 of using only the sex they have reserved, <sup>perfect</sup>  
 and to which they have been forced to <sup>herma-</sup>  
 confine themselves; for by the violation <sup>phrodites.</sup>  
 thereof, they are condemned as guilty of  
 the unnatural sin of the flesh: which is  
 proved by an arret of the parliament of  
 Paris of 1603, which condemned a young  
 hermaphrodite to be burnt, for having  
 made use of the sex he was expressly for-  
 bid.

It was for not having observed with fi- <sup>VIIth au-</sup>  
 delity the law imposed on the people of <sup>thority,</sup>  
 that species, says Nicolas Venette, that the <sup>which</sup>  
 Scottish servant maid, who had chosen the <sup>supports</sup>  
 quality of a woman, and who afterwards <sup>the pre-</sup>  
 got a citizen's daughter with child, <sup>ceding</sup>  
 was buried alive by sentence of the <sup>ones on</sup>  
 judge. Doctor Venette seems to contra- <sup>the sub-</sup>  
 dict himself in citing this example, as <sup>ject of</sup>  
 he pretends there are no genuine herma- <sup>perfect</sup>  
 phrodites; for how could this creature <sup>herma-</sup>  
 have been punished like the hermaphro- <sup>phrodites.</sup>  
 dites, who abuse both sexes, if she had  
 not been perfectly provided with both? Or,  
 dare we presume to say, that in a country,  
 where the wisdom of the laws only  
 govern, judges would have been wicked  
 G g enough

enough to pass a decision without the authority of proofs; a thing quite incredible.

But if divines are at a loss to decide under what kind they should rank the capacity of a subject, in whom they find the two sexes, how much more must they be so, when chance joins together in marriage two perfect hermaphrodites! This case is, indeed, rare, yet it happened towards the middle of the last century in the kingdom of Valentia: two young persons were married, and very soon after they were both in the state of pregnant women; they were prosecuted as guilty of the most abominable crime; but Laurence Matthieu, a physician as prudent as knowing, who was consulted on their score, at the moment they were carrying to the place of execution, in order to be burnt alive, decided in their favour, the church having given them the Power to be joined together, and to make but one body and one flesh. Here follow his words:

VIIIth  
authority,  
which  
seems to  
confirm in  
a manner  
more con-  
vincing  
than any  
other, the  
existence  
of perfect  
herma-  
phrodites.

*Tenendum firmiter credo, delictum puni-  
bile in iis hermaphroditis non reperiri; &  
quoad forum internum, opinor quod licité  
utroq;*



*utroq; sexu uti poterant, virtute potestatis corporum acquisitæ per matrimonium, cum facti fuissent duo in carne unâ ad finem naturalis prolis, vel ad finem remedii incontinentiæ.*

“ My opinion is, that there is no crime  
 “ punishable by law in these hermaphro-  
 “ dites ; and as to the court of conscience,  
 “ I hold they may lawfully make use of  
 “ either sex, in virtue of the power ac-  
 “ quired over each other's body by the  
 “ rights of marriage, being become but  
 “ one flesh, for the purposes of genera-  
 “ tion, and for remedying the vice of in-  
 “ continence.”

A single instance of this sort would seem IXth au-  
 to border a little too much on the marvel-<sup>thority,</sup>  
 lous, if nature, which can repeat at one<sup>which</sup>  
 time what she has produced at another,<sup>confirms</sup>  
 did not multiply her proofs. We find in<sup>the pre-</sup>  
 Ambrose Pareus the figure of two twins,<sup>ceding.</sup>  
 see plate II. fig. 1. joined together by the  
 back, and who both had the natural parts  
 of both sexes exact and perfect in all their  
 shapes and dimensions.

Ifidorus, on occasion of the perfect hermaphrodites, says, *Vicissim coeundo gignunt & pariunt*. “By mutual embraces they generate and bring forth.”

But let us remove our thoughts from a commerce which appears so contrary to the purity of manners; let us allow that the rigour of the laws cannot too severely punish those who, after a solemn oath, should bring openly such a scandal to the view of the publick, which could not fail of being thereby justly irritated and incensed.

I wave a great many other instances to be met with in authors, by which they seem to prove the existence of perfect hermaphrodites: my design, as I hinted, was not to make a compleat treatise on this subject, nor to fix or determine the judgment of the reader; I content myself only to recite some authorities which seem to establish their possibility; a larger work would possibly not be in the taste of the publick; and the learned would not receive the  
same



same degree of pleasure from it, as from reading the original authors themselves.

The imperfect hermaphrodites are those <sup>Imperfect herma-  
phrodites ;</sup> in whom the natural parts of both sexes <sup>what con-  
stitutes</sup> have defects, which either entirely suspend, <sup>their true  
character.</sup> or diminish their action. This last sort is the less rare, but also is that which varies the most. There have been of them, in whom there was not to be found even any the least appearance of a double sex, which however have passed for hermaphrodites ; such was a sodomite, who, by the relation of Trallian, had conceived and <sup>A sodo-  
mite con-  
ceives and  
brings  
forth.</sup> brought forth. The same author says, that a soldier brought forth at the time that Conon commanded at Athens ; because the fundament served as a conduit to the womb, just as the vagina does in a natural state.

I will not insist on the number of instances nearly of this kind, which are to be met with in authors, as the one or the other are not sufficiently conclusive to establish the proposition. The following observation, cloathed with all the necessary characters, is a proof, if not sufficiently con-

vincing, at least sufficiently probable, of the existence of imperfect hermaphrodites.

1st obser-  
vation  
made by  
the author  
of the dis-  
sertation.

In the year 1725, a species of hermaprodite, in woman's dress, applied to me on account of a hernia she said she had in the left groin. I found without the ring a small swelling, which appeared to me quite a different thing from the disease she complained of. She told me, she had always been sensible thereof, that sometimes it fell down lower; and that while it was reascending, which was the case from time to time, she underwent a great deal of pain. I caused the patient to be laid upon a bed, in order more particularly to examine her case. I at first sight perceived a sort of penis, which made me suspect the swelling of the groin might prove a testicle. I compared the ailing side with the right, where I found a like swelling, but which fell down lower; I distinctly discovered, by the touch, that these two swellings were two testicles; I was not deceived as to the form of these organs, nor on that of the epididymis, and the spermatick vessels. I was obliged, in order accurately to examine the left testicle, to pull it a little downwards, be-  
cause



cause it was, as it were, stuck on the ring, which never failed to happen, when nature was preparing for the expulsion of the menstrual blood. This testicle was one half smaller than that of the right side.

These two testicles were included each in a sort of purse or scrotum; these two purses represented well enough the two great lips of the natural parts of a woman: the inside of these lips was ruddy, strewed with sebaceous glands sufficiently distinct, and moistened with an humidity, like to that which generally drenches these parts. See plate III. letters E F. The penis issued from the superior part of these two lips; upon removing which, the whole extent of that part was discovered: it was extremely well formed, was about three inches long, and four in circumference. I could not learn whether this penis was capable of any ordinary sensation, either because it was susceptible of no motion, or that modesty taught the patient too much discretion: she only told me, that at the time of the menses it became larger than at other times, but without erection; yet I understood, notwithstanding these reasons, that it was very capable of erection,

The figure  
of the  
penis; its  
structure.

because the patient would absolutely have me cut it away; by reason, said she, of the trouble it gave her: this trouble, in my opinion, could be no other than an involuntary, spontaneous erection, much more uneasy and embarrassing, than pleasurable and satisfactory. This penis had the figure of that of a man, and appeared consisting of two cavernous bodies, an urethra, and a glans; it was covered with a skin of the same colour with that which covered the other parts of the body; that skin was plaited on the *corona* of the glans, stretched and extended itself in order to re-cover it according to its disposition: the portion of the skin, which covered the under part of the penis, was ruddy, extremely smooth, and interspersed with sebaceous glands, which made it moist.

The glans  
and its  
prepu-  
tium.

The glans was well formed and proportioned to the rest of the penis; it was not perforated at its extremity, but there we observed a small depression, which extended along the length of the under part of the penis to its root, and terminated at the superior edge of the canal of the urine: this depression, which had the figure of the *indenture* of a probe, appeared incontrovertably



testably to be the urethra of the penis sunk or depressed; for, when the patient made water, the depression became filled up and swelled; which gave reason to believe, that the urine had free access into this canal, which, being unperforated, obliged the fluid to return by the canal which nature had formed for it.

This canal was terminated by a hole entirely like to the urinary *meatus* in women; it was situated in the same part it is in the sex, and had the figure thereof; see letter C of plate III. There was no appearance of *nymphæ*. Urinary  
meatus.

On both sides of this depression, of which I have spoken, were very distinctly felt the cavernous bodies; they seemed to terminate at the superior middle part of the *ossa pubis*. Caver-  
nous  
bodies.

Immediately under the inferior border of the canal of the urine, was formed the re-union of the two separated portions of the purses or *scrota*, which formed the lips: this re-union, or commissure, resembled, imperfectly enough, what French authors The infe-  
rior re-  
union of  
the two  
lips.

†

authors

authors call the *fourchette*<sup>a</sup>. From this commissure to the anus, there were about three inches distance, which distance was occupied by a portion of lax and softish skin, which sunk under the finger, and seemed to enter into a kind of cavity; none of that seam, which is called the *raphé*, was remarked therein, but on it was observed much hair, as indeed on all the rest of the part, and none about the anus.

Appear-  
ance of  
the vagina

The cavity, into which the skin sunk, when pressed with the finger, seemed to indicate that of the vagina; which having no orifice, suffered not the menstrual blood to run off freely: it was obliged to pass every month through the anus, by taking the rout of an aperture or canal of communication, which probably reached from the vagina to the rectum.

A tumour  
in the  
perinæum  
at the  
time of  
the  
menfes.

Some days before the issuing of the menstrual blood, by the way nature had paved for it, there was a tumour formed in the perineum, which encreased gradually, and in three or four days became of the bigness of

<sup>a</sup> *Fourchette* is the inferior commissure of the lips of the vulva; it seems we have no term in English for it.



of a hen's egg : at the end of that time, the blood began to flow by the anus, without observing there any swelling either internally or externally ; which gave room to think that this blood was amassed by overflowing into the cavity where it was retained, till there had been a large enough quantity thereof, to be able to gain the height of the orifice of communication, which from that receptacle went into the rectum ; when once it had begun to flow, it continued discharging for three or four days. It was further observed, that the skin which closed up the vagina, and which formed a bunch or swelling, when the blood was there amassed, changed not colour.

Evacuation of the menses by the fundament.

Such was the state of the parts, when I saw the patient for the first time ; Mess<sup>rs</sup>. Malaval and Puzos examined her at the same time with me. These gentlemen suspended their judgment, and would not determine under what species to rank her, without having previously made a particular examen of the kind of periodical flux, which she called her courses. I know not whether these gentlemen have since

since been able to inform themselves more exactly.

Age, corpulence, and character of the patient, and the proportion of the parts.

This creature was then thirty-five years old, was five foot five inches high, had the corpulence of a thin effeminate man, had little beard; her complexion was tanned or swarthy, the skin of her body dingy or brown, her voice hoarse and mannish, her breast flat, her arms dry and muscular, the hands large, the fingers long and strong, the belly flat, the haunches large, the pubis raised much, the buttocks, the thighs and legs round, the feet small; so that she might be taken for a man from the head to the waist downwards; but for a woman too, from the waist down to the feet, bating the parts of generation. She employed herself in women's work.

The symptoms caused to this hermaphrodite by her bad conformation.

As this hermaphrodite was extremely valetudinary, and complained much more of her bad state of health during the time that the menstrual flux was in a disposition to appear, and then was subject to considerable tensions of the belly, to violent cholicks in the lumbar regions, to yawnings, to continual vertigo's, and frequent syncope's.



syncope's. I imagined that all these symptoms, to which she was subject from the age of puberty, and which had brought her in danger of sinking under them, proceeded from the menstrual blood not having liberty enough to evacuate; and that necessarily a more easy way must be paved for it, by opening the skin which closed up the vagina, and by maintaining in that part a suitable aperture. Many of the most celebrated surgeons were of my opinion; but as we agreed to perform that operation at a time the tumour of the perineum should appear, the patient went away home some miles from Paris, and was five or six months gone. She told me, on her return, that being almost brought to the point of death at the times she had had her courses upon her; and as the time of having them drew near, she thought herself obliged to come, previous to her suffering what she then apprehended; yet I thought it proper to make my remarks before undertaking the operation. On the morrow after her arrival, she complained of colick pains, fell into swooning fits and faintings, could not eat for all that day; her pulse was raised, frequent, and unequal.

Discharge  
of the  
menfes.

unequal. I feveral times touched the perineum the firft day, without obferving therein any thing more than ordinary ; the fecond day I began to perceive a fmall fwelling, but the third it became of the bignefs of a hen's egg, without changing the colour of the fkin ; the tumour diminished confiderably when the patient was a-bed. M. de la Brunnerie, and my father, made the very fame obfervations. At length, on the clofe of the fourth day, we faw the blood iffuing out at the fundament in a very fmall quantity, of a colour rather ferous than fanguine ; it continued flowing, but in a larger quantity for five days, of the ordinary colour. On the fixth day the evacuation diminifhed, and was quite dried up on the feventh. During all the time of the courfes, we informed ourfelves of the ftate of the fundament, where we found not the leaft appearance of hæmorrhoids. The moft favourable time for performing the operation, had been a month after, when the tumour was to re-appear ; but the patient could only ftay fifteen or twenty days at Paris : I was then obliged to avail myfelf of that time of neceffity. I called together Meffs. de la  
I Brunnerie,



Brunnerie, Carére, Guerin the elder, Morand, de Garengéot, Foubert, Grammont, Galin, and my father ; all were of opinion (after having heard my exposal, and examined the parts) that I should proceed to the operation.

I caused the patient to lie on the side of a bed, her legs being supported on the knees of two of the consultants, who held her thighs asunder. I pinched the skin, which covered the vagina, transversely, with the thumb and forefinger of my left-hand ; Mr. Guerin laid hold also with his fingers on the same fold, on the side opposite to that which I held ; I afterwards cut that skin with a strait bistoury, by describing a line perpendicular to the anus ; at one stroke I came to a sort of cellular texture, which I took hold on with a hook, and which I afterwards cut with a pair of scissors. I conveyed my finger into the aperture, which procured me the division of the cellular texture ; it entered without any resistance into a void or empty space, which was considered by those of the consultants, who put their finger into it, as the cavity of the vagina. This cavity seemed to us to have two or three inches in

Operation ; in what manner performed.

The ma-  
trix dis-  
tinguished  
by the  
touch.

in depth, and about two in circumference. I filled it with several taps of lint, tied with thread. On the following day I substituted, for the taps of lint, a tent of  $3\frac{1}{2}$  inches long, and one in diameter. On the sixth day of the operation, Mr. Verdier and I felt, at the end of the finger, an eminence at the bottom of the vagina, which appeared to us to be the orifice of the part of the matrix which enters into the vagina. From the sixth day after the operation, the patient was not dressed for twenty-five days that she stayed at Paris, but with a very large tent made of prepared sponge, which was never charged with purulent matter but at the parts, which answered to the aperture of the skin, whose edges suppurated a very long time. I gave pieces of prepared sponge to the patient to use herself. Some days after getting home, the blood of the courses came out at the aperture which I had made for it, without a single drop passing by the fundament; she had also none of the symptoms, to which she had been formerly subject, only for five or six hours before the flux, she had colick pains like those she had always had upon her. The evacuation lasted only three days; during which time the patient

discon-



discontinued the use of the sponge, as I had directed her, and continued it afterwards. Five weeks after, the blood re-appeared still by the same part, and flowed for three or four days. The patient imagined then she might be without the sponge. The fistulous orifice, that is to say, the aperture which I had made, appeared to be closed up; yet it opened on the third month to give passage to the blood, when it was about to re-appear. This happened still for two months longer; but on the sixth month the blood resumed its course by the fundament, and all the symptoms, to which the patient had been subject before the operation, recurred upon her afresh. She thus suffered silently, without acquainting me for eight or ten months; at the end of which time she consulted me: I had no other means to propose to her than the same operation; but particular reasons hindered the submitting to it.

We see by this observation, of what consequence the resources of surgery are, and that if nature departs from her usual course, and forgets herself, she may, by the aids of this art, be redressed, and new ways, capable of putting her in the state

H h

of

of perfection she ought to have, be paved out for her, provided the patients have discretion enough to assist themselves, and second the surgeon's care.

The death  
of the  
patient;  
the open-  
ing of the  
body.

The patient died in 1740; I was apprized of the day of her death; I communicated it to the academy of surgery. The academy named M. Verdier and Foubert to make their report. M. Verdier, on whom I deferred the honour of opening the body, carried home with him all the parts, in order to make a particular dissection of them in presence of M. Foubert, myself, and some other curious persons, who went along with us to the defunct's. M. Verdier made several appointments, but kept none of them, through an affectation but little decent. What were his reasons to behave in this manner, and to have made no report to the academy, are things quite unknown to me.

Subjects  
ill-con-  
formed,  
to which  
we cannot  
give the  
quality of  
herma-  
phrodites.

It now remains to make a general examen of a species of subjects, to which it is not possible to give any character of hermaphrodite, and even sometimes pretty difficult to determine their sex.

There



There are some, in whom we cannot easily distinguish whether what appears prominent or sticking out, be the penis or the clitoris, the part which appears to represent either, being the most fantastical and various that can be, more or less long or large, of an irregular, round, square, flat, spiral, unequal, or uneven figure, susceptible of any voluptuous or pleasurable sensation, of inflation, erection, or quite insensible of all. There are of them who have a sort of glands, which we would be apt to take for testicles, did we not more narrowly attend to them: others have genuine testicles, but placed differently than in the natural state; as the subject of which Reald. Columbus speaks, who had them in the perineum: and there has been seen in London, not long ago, a man who had them in the same place.

In some subjects we distinguish not whether there be any vagina or no, unless chance make the discovery for us. Martinus Schurigius relates the history of a young woman, who arrived to a very advanced age, without every knowing whether she had any vagina or no. She had occasion

Had observation.  
The vagina un-  
apparent,  
is only  
discovered  
by chance.

to take a glyster, but as no one could administer it, her surgeon undertook the task: he was surprized to find the decoction come out in proportion as the syringe voided it; he drew back the pipe, and introduced his finger into the fundament; and then he perceived that the canal, by which the excrements were discharged, was larger than commonly the fundament is, went also to the matrix, whose orifice he touched with his finger.

III<sup>d</sup> observation.  
The excrements and urine sometimes come out at the vagina.

This observation seems to confirm what Palfyn relates after Zaborella, professor of physick, who had a servant-maid, whose urine and excrements came out by the vagina. This fact is related as a natural accident, having nothing in common with the same accidents which happen to certain women, the neck of whose bladder, and the rectum, are tore in hard labour.

The urine sometimes discharged byways quite extraordinary.

There are also people ill-conformed, who though they have canals which seem proper for conveying the urine out of the bladder, yet they discharge it by other peculiar passages; such was that hermaphrodite of Columbus, who discharged the urine above the os pubis.

Nature,



Nature, in some subjects, forms to her-<sup>IVth ob-</sup>  
 self peculiar routs for the evacuation of<sup>servation.</sup>  
 the courses, as was remarked in the per-<sup>The</sup>  
 son of a monk, who died at the Hotel-<sup>menfes</sup>  
 Dieu of Paris in 1726. M. Boudou, head-<sup>are some-</sup>  
 surgeon of that hospital, opened the body<sup>times dif-</sup>  
 of this religious. The exterior parts con-<sup>charged</sup>  
 sisted in a chink of no great depth, ruddy<sup>by pecu-</sup>  
 within, like the part of a woman; the<sup>liar out-</sup>  
 two edges of that chink represented, im-<sup>lets.</sup>  
 perfectly enough, the two lips of the vulva.  
 In one of these two lips there was a testi-  
 cle, in the other none: from the space be-  
 tween these two lips issued forth, towards  
 the superior part, a sort of penis ill-formed,  
 unperforated. The urine had been al-  
 ways determined through an orifice situa-  
 ted under the penis, at its root, in the  
 part where is the meatus urinarius of wo-  
 men. There was no appearance of a va-  
 gina externally. After this examen, he  
 opened the belly; he found that the sper-  
 matick vessels observed nearly the same  
 direction as in the natural state; such of  
 these vessels, as were of the side of the  
 testicle, went to empty themselves into that  
 organ; instead of the bladder of that side,  
 in the ordinary situation, there was a fe-

minal vesicle; the spermatick vessels of the opposite side proceeded to lose themselves between the bladder and rectum in a small body, which, as far as Mr. Boudou imagined, was a matrix, which, for want of use, was become collapsed.

This religious had an ulcer in one of his legs, from whence periodically flowed, every month, a sanious serosity, which made Mr. Boudou conjecture, that the discharge, which was made by that ulcer, supplied the place of the menses.

There are in this observation some other peculiarities, in which I am not enough instructed; they would come much better from the hands of Mr. Boudou himself.

Vth observation.  
A monk hermaphrodite delivered of a child.

It is not only in our days, that such sort of people are to be met with in cloisters: Gaspar Bauhin relates, that in the year 1478, in the reign of Louis XI. there was a monk hermaphrodite at Issoire in Auvergne, who had the advantage of both sexes; he came to be in the condition of a pregnant woman, and was delivered of a child at the usual term.

*Mas,*



*Mas, mulier, monachus, mundi mirabile  
monstrum.*

An accurate description of the parts would have given us more satisfaction than all the fine gingle of words in this verse. The place also we assign to this history, screens us from the reproach that might be thrown out upon us, did we put it to the rank of perfect hermaphrodites.

These sorts of subjects, ill-constructed, do often impose on the people of the art, the most skilled in the structure of the parts ; and thus it is nowise surprizing, to find midwives embarrassed, who have often taken males for females, and females for males ; because that in these the clitoris is sometimes longer than in the natural state ; and in those, the penis is extremely short, and the scrotum, folded up in two, appears as if divided by a slit : of this we find instances in Riolanus, and De Graaf ; my practice has furnished me with one, as follows.

M. Perrat, man-midwife to the queen,  
was consulted for a child of six years old,  
H h 4

With ob-  
servation.

A girl  
taken for  
a boy till  
the age of  
six years.  
who

who passed for a girl, on a hernia he was supposed to have; he devolved on me the decision and the care: I found that the pretended hernia was a testicle, which gave me the curiosity particularly to examine the scrotum and penis: the scrotum was exactly divided by a slit, like to that of the vulva; this slit was ruddy within, and very moist; the penis was extremely short, and scarce came out of the slit; the testicle, which was taken for a hernia, had begun to come out of the belly but lately, and that of the other side had not yet appeared. I acquainted the parents with their mistake of the sex, which gave them a double satisfaction.

VIIth observation.

A female African, who passed for an hermaphrodite.

We sometimes meet with conformations still more vitiated, which are made to pass current with persons prepared by prejudices. Dr. Douglass disabused the publick, by the description he gave of the natural parts of a female African, who ten years ago passed in London for an hermaphrodite: he caused to engrave the plate, which Mr. Cheselden has published in his anatomy, and Dr. Parsons in his critical inquiry into hermaphrodites. This African



African had all the proportions of body, the tone of voice, and the ways of a woman. Two peculiarities only in her parts of generation, were sufficient to impose on the simple, namely, the clitoris and the lips of the vulva. The clitoris, as may be seen plate IV. which I caused to engrave after the original, is indeed larger and longer than in the natural state, but has nothing to characterise the penis; the right lip, excessively large, compared with the other, is, with probability, supposed by Dr. Douglass to include a hernia of the ovaries (it might also be an epiplocele) which imposed on those who considered it as a testicle. The marking down the urethra, which I suppose to be between the nymphæ, has escaped the accuracy of Dr. Douglass. Dr. Parsons's work contains several instances of this sort, which he has drawn from authors; they all tend to his design, namely, the proving the opinion he is in, that there is no hermaphrodite among men; *that no hermaphroditical nature can exist in human bodies.*

Nothing is more common, than to hear mention made of these sorts of persons as  
her-

hermaphrodites ; and the publick would for ever be under the illusion, if persons of wisdom did not endeavour to disabuse it.

VIIIth  
observa-  
tion.  
A child  
ill-con-  
formed,  
who pas-  
sed for an  
herma-  
phrodite.

M. Faudacque, surgeon at Namur, says, in an observation which he has communicated to the academy of surgery at Paris, that he has seen, at three leagues distance from Givet, a child of eight months old, who passed for an hermaphrodite. The Penis was unperforated both at the glans and preputium ; he made water by an orifice greatly dilated, like a sort of vulva, situated immediately under the scrotum. As to the rest, the penis was, says M. Faudacque, disfigured and monstrous, resembled a small snail, was so curled and bent, that the extremity of the glans, covered with the preputium, touched the posterior part of the root of the penis. All the part, which answered to the place where naturally is the canal of the urethra, appeared to be ligamentous, and so short, as to bridle in and bend the penis in the manner I have described. When Mr. Faudacque saw the child for the first time, the testicles were not yet come down



down into the scrotum, but since he has observed them there.

Mr. Mertru, surgeon at Paris, has published in the *Mercure de France* for the month of February of this year 1750, the description of the parts of the body of one named Michel-Anne Drouart, aged about sixteen, born at Paris, in the Fauxbourg St. Marceau. The state of this young man, to whom M. Mertru ascribes the character of hermaphrodite, leaves no doubt of the species of his sex, since he is in London, where he arrived four or five months ago. The difficulty of finding the cause of the sudden change of his state, will justify my silence. His countenance, his voice, his corpulence, the proportion of his limbs, denote very distinctly the male kind. He is a lad, who, for his age, is well built, but ill-formed in the parts of generation of a man, which are the only ones he has. Nature, indeed, seems to have forgot herself in the conformation of the penis; for tho' of the natural bulk, size, and figure, yet it is unperforated and bent downwards, being forced

IXth observation on another boy, taken for an hermaphrodite.

forced to take that turn by a fold of the skin, which extends from its root to the frenum : but as nature rarely loses on one hand, but she gains on the other, she has formed for herself a way at the root of the penis for the discharge of the urine and other excretions. We may compare this aperture to the meatus urinarius in women : if there is any difference, it is only in the exterior figure of this orifice, in that it forms a sort of excrescence, composed of a simple fold of the skin, which is of a semilunar figure ; this fold forms a cavity about three lines in depth, and admits the extremity of the little finger to lodge in it ; it terminates almost at all the circumference of the meatus urinarius, and has the figure of a funnel. On removing the two sides of this excrescence, we observe in the inferior part a very delicate folding, but in which we found nothing to characterize the *fourchette* ; this part forms, in young women especially, who have had no children, a perfect crescent, and raised much, which does not appear in this subject. At the bottom of the sort of funnel I mentioned, I find a small nipple (as Mr. Mertru  
I remarks)



remarks) but to us it appeared to be another vice of conformation: it is placed over-against the urethra, and makes the jet of urine forked. The absence of the testicles, in the two divided portions of the scrotum, holds still to this day; but their existence is for that not the less certain, since the subject has evacuations of seminal matter, of the same consistence and colour with that of a man of his age, in consequence of the erections, which, by his own confession, procure him the enjoyment of the sex. The want of testicles in the scrotum, is a defect common to a good many men, which hinders not their having a great deal of vigour; on the contrary, they are much more able for generation, on account of the heat in which these organs are kept<sup>a</sup>. *I have on this subject a memoir both useful and interesting, which I purpose to publish soon.* As to the menses, they have not hitherto appeared, and nothing can make me believe they ever can.

We reckon then by this report, that the subject in question, is a lad ill-formed  
in

<sup>a</sup> This manner of speaking, though improper, ceases not to be understood.

Xth observation.  
A subject in which the menfes come out by the penis.

in his genital parts, and incapable of generation. The memoirs of the academy of sciences of Paris, make mention of a sort of creature much more singular, and whose sex appears to me difficult to determine.

In figure and body, in gross, it resembled a girl: it was baptized by the name Margaret. The construction of the natural parts was such, that no vagina appeared; there were, however, two lips, which characterised only the part of the woman. From between these lips there issued forth a pretty long penis, about eight inches in length, when in a state of erection; it was well formed, but without any preputium. There was, besides, no appearance of testicles; the urine and semen issued out as in a man, through the canal of the urethra but what was more extraordinary, the menfes passed regularly every month thro' the same canal.

XIth observation.  
An hermaphrodite of a very peculiar sort.

I conclude with the following observation; it must be considered here as out of its place: its singularity might entitle it to be



be ranked under the species of perfect hermaphrodites: but as the person, who is the subject thereof, never had any children, and as there is no proof it ever begot any, this might be made a handle of to charge us with being inclined to decide too lightly. The readers therefore will be left at liberty to give to this subject what character they shall judge to suit best to it.

The observation is owing to M. Gallay, surgeon of Gargenville near Mantes in Normandy, who has submitted it to the judgment of the academy of surgery of Paris.

On the 27th of March 1740, being, says he, at the village of Issou near Mantes, I learned they were to bury, that very day, a woman who had passed for an hermaphrodite; I arrived at the moment they were about to convey the body into the earth. I begged of the husband to allow me to examine her, which he granted, on condition I should not open her. The natural parts appeared to me to consist of the lips, the nymphæ, &c. At the superior angle of the great chink, where the clitoris should

should be, there was a well-conditioned penis, the glans was proportional, and covered in part with its preputium, was as perfectly crowned as that of a man; at the extremity of this glans, there was an orifice, into which I introduced a probe, which entered quite into the bladder, from which issued out the little urine it contained. This penis was three inches six lines in length, and three inches four lines in circumference. The urine had no other outlet than by this canal. I discovered no testicles, the great lips were the parts which should naturally contain them; the vagina was placed, as usual, at the inferior part of the vulva; thither I introduced my fingers; with their extremities I felt the orifice of the matrix, whose edges were hard, and, as it were, cartilaginous. The husband withdrew for a moment; I improved this time of absence in opening the belly, in hopes of finding there the testicles; my expectation proved vain, I found nothing that had any relation to these parts; the ovaries, the tubæ fallopianæ, the womb, were scirrhus. The return of the husband prevented the carrying any farther my curiosity. There is room to  
believe,



believe, that the penis consisted of all the parts necessary to its actions, since the husband assured me, that it was often in a state of erection. I could not learn, whether in that state it had ever discharged any sort of feminal matter. As to the rest, this woman had had her courses in her youth, never had had any children; her face was thick set with a beard, the tone of her voice was mannish.

I here give, by way of supplement to these observations, the history of two hermaphrodites, which are said to be of the perfect kind. The one was a young lady of condition, the other a Religious of the order of St. Francis, who had the direction of the young lady's conscience. Lust and the devil put it into the heart of the monk, to join with his penance a commerce very different from that which his profession allowed of; but he paid dearly for his incontinence, for after a proper period he brought forth a girl, which cost him his life, through the hard labour he underwent.

XIIth observation.  
Two hermaphrodites in carnal commerce together.

The girl, who was born of this copulation in a town of Italy, where the scene of the action lay, is now actually living at Paris. She has given the history of her father and mother; and the manuscript, which she purposes to publish forthwith, is in the hands of a person of my acquaintance. The publick will then judge what place in our dissertation this history should occupy.

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*Corrigenda.* In Page 450, Line 17, for Physician read Lawyer; in p. 461, l. 1. after Syncope's, for . put ;

## F I N I S.

At the Publisher's of this, may be had the Author's *Dissertation on HERNIA'S or RUPTURES*; in which he points out the Remedies proper for these Disorders, and his Rules for the Use of the Bandages invented by him much more sure and lighter, as also more commodious, than any hitherto invented.

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